DOCTOR OF BUSINESS (DBA)

A knowledge-based perspective of formal staff mentoring in higher education: context, process and outcomes.

Connolly, Marie

Award date:
2018

Awarding institution:
University of Bath

A knowledge-based perspective of formal staff mentoring in higher education: context, process and outcomes

Marie Therese Connolly

A thesis submitted for the degree of Doctor of Business Administration
In Higher Education Management (DBAHEM)

University of Bath

School of Management

April 2018

Table of contents

List of tables

List of figures

Acknowledgements

I cannot believe it is finally time to sit and ponder and thank the very many people who have helped and supported me on this long journey. I have gone over this many times in my head but now today I find myself with a lump in my throat. It has been one emotional journey with lots of stops and starts along the way.

Firstly, I would like to thank the School of Management DBA staff. The lecturers, the heads of school and, above all, the administrative staff for always being so accommodating and professional answering what were, I am sure, at times very annoying queries. I would like to acknowledge my DBA10 classmates, whose company I thoroughly enjoyed during our stays in Bath – the parties, the dancing, but most of all, the lively intellectual exchange of 'tacit knowledge'. Thank you also to UL and my director for supporting me to undertake this journey.

To my supervisor Professor Juani Swart, what can I say? You are an inspiration. Your work ethic is just exceptional. Your support and guidance has just been outstanding. I know I fell on my feet the day you said you would be my supervisor. We may have started out as supervisor and student but today, as I write this, I know you will be a friend for life. I cannot thank you enough. To my second supervisor, Dr. Katharina Chudzikowski, thank you for all your support, your valuable feedback and those most important skype calls. Thank you.

To my children – Aimee, Aaron and Meghan – you are the greatest blessing I have in life. You fill me with such amazing pride watching you grow into beautiful, kind, successful people. Although you live on the other side of the world, you are always in my heart. I could not love you any more if I tried. Thank you for always believing in me and for helping and supporting me through this journey.

To my best friend, my soul mate, my darling husband Brian. How will I ever be able to thank you? Thank you for the years of encouragement. Thank you for never giving up on me. Thank you for your love and patience and the endless cups of coffee. Thank you for taking such pride in me. Without you by my side, this journey would never have come to an end.

Finally, I dedicate my thesis to the memory of my dear precious Dad, who went on his own journey during my DBA time. Thank you for teaching me to love life, to love people, to laugh and to cry and to continue to learn until the day I die. Thank you for loving me and for having such pride and belief in me. You are dearly missed and, as they say Dad, this one is for you.

Marie

Abstract

As a powerful form of knowledge creation, mentoring can deliver new ideas to organisations. Theorists and practitioners alike advocate that engaging in effective mentoring relationships can be very useful to an individual's personal and professional development. However, very little empirical work has been carried out on the impact of mentoring relationships on knowledge creation and sharing.

Through the development of a conceptual model of mentoring from a knowledge-based perspective (Figure 2.1), which is based on Nonaka and Takeuchi's (1995) theoretical SECI (socialisation, externalisation, combination and integration) process, this research focuses in particular on the socialisation dimension – the face-to-face sharing of knowledge between mentors and mentees. Using a qualitative, mixed-methods approach involving a single case study, a focus group and 27 semi-structured, one-to-one interviews, my research is framed on the three elements of the knowledge-creation process:

1. The context: the space where mentoring takes place
2. The process: the matching and knowledge-conversion process within the mentoring relationship
3. The outcomes: intrinsic and extrinsic outcomes experienced by those involved in mentoring partnerships

The research findings present a new, knowledge-based perspective of formal staff mentoring in higher education and, in so doing, contribute to narrowing the identified gaps in the literature. The research concludes that formal mentoring provides a 'safe socialisation space' for the spiral of knowledge creation and transfer to flourish through sharing and transferring existing knowledge. In particular, the findings show that the transfer of tacit knowledge, specifically institutional tacit knowledge, from the more experienced mentor to the mentee results in the creation of new knowledge and key intrinsic and extrinsic outcomes for the mentee, mentor and institution.

Abbreviations

‘ba’	A knowledge-enabling safe space
F	Female
HE	Higher education
HEA	Higher Education Authority
HEI	Higher education institution
HR	Human Resources
M	Male
ME	Mentee
ME/MR	Mentee and Mentor
MR	Mentor
OECD	Organisation for Economic Co-operation and Development
p.	Page
QUB	Queen’s University Belfast
SECI Model	The socialisation, externalisation, combination and internalisation (SECI) Model, Nonaka and Takeuchi (1995)
SRQ	Sub-research Question
TA	Thematic analysis

Chapter 1 – Introduction

1.1 Introduction

Many organisations advocate the value of mentoring and adopt such schemes for a multiplicity of purposes, including socialisation, personal development for performance enhancement, talent identification and career development (Allen et al., 2006). Publicity about the perceived importance of mentoring in business careers has created interest in this phenomenon in the HE sector as the thinking is that if mentoring leads to success in a highly competitive profit-driven environment, it should "hold greater potential in collegiate, learning-oriented milieu such as higher education" (Merriam et al., 1987, p.200).

We have seen mentoring evolve over the decades (Levinson et al., 1978) from traditional mentoring, where the mentor supports, guides and counsels (Kram and Isabella, 1985) to mentoring as it is seen today – a dynamnic reciprocal mutually beneficial relationship (Nishida, 1990; Johnson, 2015; Ragins, 2016); a collaborative learning relationship (Johnson, 2015; Ragins, 2016) with mentoring providing a space for mutual discovery and learning (Ragins, 2016) for both mentor and mentee; and a form of learning that has been linked to career success, personal growth, leadership development and increased productivity (Nishida et al., 1993; Smith et al., 2001).

Theorists and practitioners alike all advocate that engaging in effective mentoring relationships can be very useful for an individual's personal and professional development (Kram and Isabella, 1985; Higgins and Kram, 2001; Rock and Garavan, 2011; Ragins, 2016). However, despite this, there has been little empirical work on the impact of mentoring relationships on knowledge creation and sharing, particularly tacit knowledge sharing within the higher education (HE) sector – the focus of my research.

To provide a new, knowledge-based perspective on mentoring in HE and to contribute to narrowing the identified gaps in the literature (Sorcinelli and Yun, 2007; Ragins, 2016), my research presents the reported experiences of those involved in formal mentoring relationships in a HE institution (HEI) – the case study institution. The research focuses in particular on the socialisation (Nonaka et al., 2000) dimension, the face-to-face sharing of knowledge, in particular 'tacit knowledge', between mentors and mentees. For new knowledge to be created, there must be willingness from those who have the knowledge – the 'know-how' (Garavan et al., 2007; Gubbins et al., 2012; Swart et al., 2014) – to share with others. Establishing whether mentoring provides the 'socialisation space' for the sharing of knowledge is a focus of my research.

There are many different facets to mentoring, from traditional mentoring, peer-to-peer mentoring, co-mentoring, developmental mentoring, goal-specific mentoring, mentoring circles, muse mentoring, e-mentoring to relational mentoring, all of which evoke many different types of arrangement, from formal to informal, one-to-one (dyadic) pairs, peer

to peer, senior to junior, mentoring circles, etc. The focus of my research is on formal staff mentoring within the HE sector.

1.2 Rationale, theoretical framework and research question

As set out, there is little empirical work on the impact of mentoring relationships on knowledge creation and sharing, and the mentoring literature "has largely ignored the function of information and knowledge sharing, which can play a significant role in the mentoring relationship" (Bryant, 2005, p.320). The aim of my research is to contribute to narrowing this identified research gap by taking a knowledge-based perspective of formal staff mentoring within the HE sector.

I based my research on the theoretical framework of Nonaka and Takeuchi (1995), known as the SECI process, whereby knowledge is created through four modes of knowledge conversion: socialisation, externalisation, combination and internalisation (SECI).

1. Socialisation: The tacit acquisition of tacit knowledge by people who do not have it from people who do (Andreeva and Ikhilchik, 2011); learning is converted to new tacit knowledge through interaction between co-workers
2. Externalisation: The conversion of tacit knowledge to explicit knowledge
3. Combination: The conversion of explicit knowledge into new, more complex explicit knowledge
4. Internalisation: The conversion of this new explicit knowledge into tacit knowledge to be shared onwards throughout the organisation, providing an environment for the knowledge spiral to flourish

While my research focuses on the sharing of knowledge in general, I am particularly interested in the socialisation dimension of the SECI process, i.e., the creation and sharing of knowledge through face-to-face interaction between workers. My overall aim is to present a new, knowledge-based perspective of formal mentoring within the HE sector.

Through the development of a conceptual model of mentoring from a knowledge-based perspective, I framed my research on the three elements of the knowledge-creating process (Nonaka et al., 2000):

1. The context: the knowledge place, the 'ba', the space where the mentoring takes place
2. The process: the matching process, the knowledge conversion process, i.e., the SECI model, the knowledge sharing, transfer and conversion process within the mentoring relationship
3. The outcomes: the growth and shift in knowledge experienced through the conversion process, assessing what key intrinsic and extrinsic outcomes, if any, were experienced by those involved in the mentoring partnerships

Each of the sub-research questions (SRQ) posed in the study were also framed using the conceptual model of mentoring from a knowledge-based perspective and were generated so as to inform our understanding of the nature of the context, process and outcomes of formal staff mentoring relationships within the HE sector answering the following questions:

1. What are the contextual factors that influence the mentoring process from the perspectives of the mentee and mentor within a HE context? (SRQ1 – the context)
2. What is the nature of the matching process? (SRQ2 – the process)
3. How does knowledge sharing and transfer take place within the mentoring process? (SRQ3 – the process)
4. What are the key outcomes of the mentoring process as experienced by both mentees and mentors? (SRQ4 – the outcomes)

Through the use of a single case study institution, a focus group and 27 semi-structured one-to-one interviews (13 mentors, 12 mentees and two participants who had acted as both mentees and mentors), the aim of my research is to make a valuable and unique contribution to the literature on formal mentoring within the HE sector from a knowledge-based perspective.

1.3 Thesis structure

This thesis follows a well-established structural and sequential pattern. Chapter 1 sets out the rationale, theoretical framework and research aim of presenting a new, knowledge-based perspective of mentoring in the HE sector. Chapter 2 presents an extensive review of the literature on mentoring, specifically mentoring from a knowledge perspective with a focus on the socialisation (Nonaka et al., 2000) aspect of mentoring, leading to the development of an initial set of sub-themes that informed the data collection and assisted with the creation of the interview guide and the conceptual model. The conceptual model was then used as a framework to focus the literature review under the key headings of context, process and outcomes.

The definitions of mentoring, particularly within the context of my research (the HE sector) are presented. This is followed by a short contextual overview of the evolution of mentoring, from traditional to relational mentoring, which is more commonly used today, formal and informal. Within the mentoring context, a review of the literature on mentoring and gender, in particular women and mentoring, is presented, and this is followed by a review of literature on mentoring and trust and the importance of certain mentoring attributes.

The next section in the chapter takes an in-depth look at the mentoring process, the matching process and the concept of knowledge-sharing. The creation of new knowledge through the dynamic process of knowledge creation, knowledge

management and knowledge transfer within the formal mentoring relationship is considered.

This chapter culminates in a focus on mentoring outcomes. A structural model of the relationship between mentoring and outcomes (Kammeyer-Mueller and Judge, 2008) is presented and is used to inform the interview guide on outcomes.

Chapter 3 details the methodological choices considered in order to gain insights into the experiences of mentors and mentees involved in a formal mentoring scheme in the case study institution. A comprehensive review of the choices available led to the selection of a qualitative paradigm (Gill and Johnson, 2010), an interpretative approach 'to understand how people make sense of their worlds'. As my research involved the study of people (one focus group and 27 one-to-one, semi-structured interviews), an in-depth qualitative method and an inductive thematic analysis approach was deemed the most appropriate.

The context within which the study was conducted, i.e., the case study institution, is presented alongside the research participant details. Discussion on the use of the Braun and Clarke (2006) six-step approach to data analysis using NVivo is also presented.

Chapter 4 reports the main findings from the research conducted through a focus group (12 participants (seven females (7F) and five males (5M)) and 27 one-to-one, semi-structured interviews (13 mentors (8F, 5M), 12 mentees (8F, 4M) and two mentees/mentors (2F)). Using the data analysis tool NVivo, the findings are presented in three thematic sections as presented in the conceptual model of mentoring from a knowledge-based perspective, i.e., context, process and outcomes. Sample of verbatim responses from the research participants are presented in appendices 1 to 9.

Chapter 5 presents the analysis and discussion of the study's findings. This is presented thematically using the context of the research objectives and the sub-research questions posed. The discussion presents a 'deeper understanding of mentoring from a knowledge-based perspective' presenting a new lens on how formal mentoring within the HE sector should be viewed. The contribution of the research to narrowing the identified gap in the literature and to professional practice follows. The chapter culminates with the limitations of the research and possible agendas for future research.

Chapter 6 concludes the research and presents a reflection both on the findings and my research journey.

Chapter 2 – Literature review

2.1 Introduction

Mentoring is a powerful form of knowledge creation that delivers new ideas to organisations (Bryant, 2005). The most successful people in industry openly accredit their success to the role a mentor played in their early careers (Kanter, 1977; Roch, 1978; Mavrinac, 2005; Johnson, 2015). Theorists and practitioners alike advocate that engaging in effective mentoring relationships can be very useful for an individual's personal and professional development (Kram and Isabella, 1985; Higgins and Kram, 2001; Rock and Garavan, 2011; Ragins, 2016). Despite this, however, there has been little empirical work carried out on the impact of mentoring relationships on knowledge creation and sharing, particularly tacit knowledge sharing, within the HE sector.

Influenced by the SECI model (Nonaka and Takeuchi, 1995) – a key component of the knowledge-creating process (Nonaka et al., 2000) – the core aim of my research is to present a new, knowledge-based perspective of formal staff mentoring in HE.

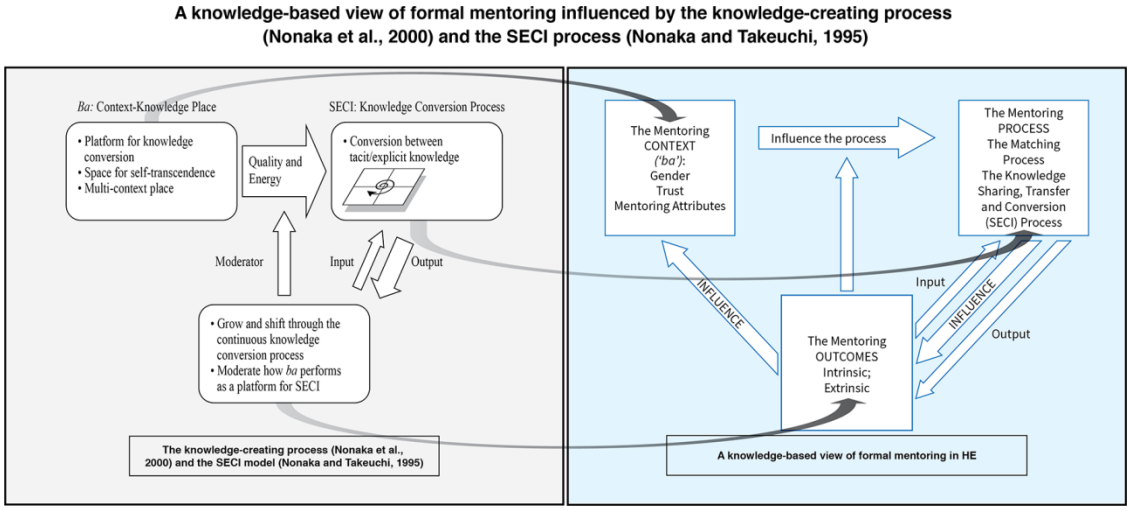

Figure 2.1 A knowledge-based view of formal mentoring in HE (the author)

Using the model as a framework to focus my literature review, three components of a knowledge-based perspective of mentoring were identified: (i) the context – the knowledge place where the interaction between co-workers (socialisation) takes place; (ii) the process – the matching process and the knowledge conversion process, i.e., the SECI process, the knowledge sharing, transfer and conversion process within the mentoring relationship; and (iii) the outcomes – the growth and shift in knowledge experienced through the conversion process.

The sub-research questions set out below are all related to the literature and have been generated so as to inform our understanding of the nature of the context, process and outcomes of formal staff mentoring relationships within the HE sector.

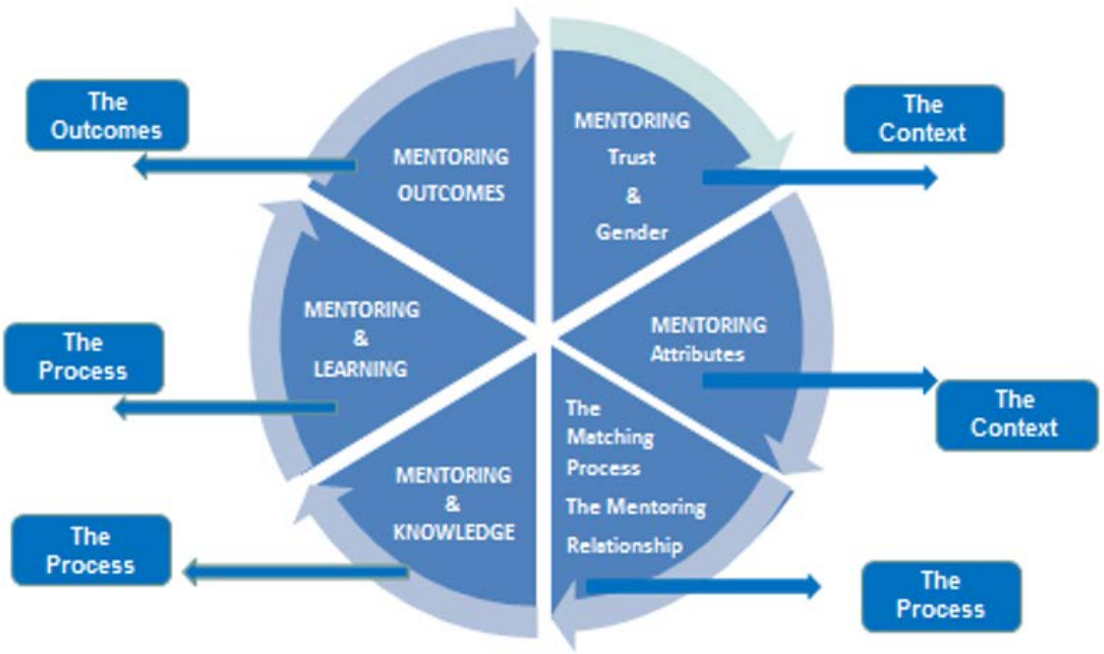

Figure 2.2 Key themes identified in the literature

The mentoring context

- SRQ1: What are the contextual factors that influence the mentoring process from the perspectives of the mentee and mentor within a HE context?

The mentoring process

- SRQ2: What is the nature of the matching process?
- SRQ3: How does knowledge sharing and transfer take place within the mentoring process?

The mentoring outcomes

- SRQ4: What are the key outcomes of the mentoring process as experienced by both mentees and mentors?

The following sections of this chapter provide a concise review of the literature relevant to the theoretical background and my research context. The chapter is presented under the key headings of my research, the context (section 2.5), the process (section 2.6) and the outcomes (section 2.7).

As set out in the introduction, I will firstly look at the definitions of mentoring, particularly mentoring within the HE sector. This section presents an overview of the evolution of mentoring from traditional mentoring to relational mentoring, formal and informal. The key related topics of mentoring and gender, mentoring and trust and mentoring attributes then follow.

The mentoring process will then be reviewed, particularly the connection between mentoring and knowledge and the sharing of knowledge, in particular the sharing of

tacit knowledge, and the creation of new knowledge within formal mentoring relationships. Finally, I will look at the literature on mentoring outcomes.

2.2 Definitions of mentors and mentoring

We have seen mentoring evolve over the decades (Levinson et al., 1978) from traditional mentoring, where mentors are described as gurus and teachers, to mentoring today, which is described as a coming together of two people to share knowledge and experience and to put plans in place to support the mentee to achieve their aspirations. Alongside this evolution, the definitions of mentoring have changed. Traditionally, a mentor was seen as someone who "supports, guides and counsels a young adult to accomplish the mastery of the adult world of work" (Kram, 1985, p.2). Today, mentoring is seen as a dynamic reciprocal relationship in a work environment between an advanced career incumbent (mentor) and a mentee (protégé) aimed at promoting the career development of both (Nishida et al., 1993; Smith et al., 2001).

The definition of a mentor is "elusive and varies according to the view of the author" (Dogson, 1986, p.29); therefore, choosing one definition that conjures up everything mentoring encompasses, particularly within the HE sector, is quite difficult. Table 2.1 presents some of the relevant definitions. As can be seen from those definitions, the concept of the mentor is very broad. However, there are some key similarities within the definitions, such as "a mentor is usually a high-ranking, influential, senior member of the organisation with significant experience and knowledge and is willing to share their experience with younger employees" (Ragins, 1989; Beardwell and Claydon, 2007, p.317).

Table 2.1 Definitions of mentors and mentoring

Mentoring definitions	Source
"Mentoring is a unique relationship that can foster exceptional levels of personal growth, learning and discovery."	Ragins (2016, p.10)
"A mentor is an experienced employee who serves as a role model, provides support, direction and feedback regarding career plans and interpersonal development. A mentor is also someone who is in a position of power, who looks out for you, gives you advice and/or brings your accomplishments to the attention of people who have power in the company."	Day and Allen (2004, p.77)
"A mentor can generally be defined as an influential individual in your work environment who has advanced work experience and knowledge and who is committed to providing upward mobility and support to your career."	Scandura and Williams (2001, p.349)
Mentors are "individuals with advanced experience and knowledge who are committed to providing upward support and mobility to their protégés' careers".	Singh et al. (2002, p.391)
Mentoring is a "relationship between equals in which one or more of those involved is enabled to increase awareness, identify alternatives and initiate action to develop themselves".	Russell and Adams (1997, p.2)
"A mentor is an off-line person who helps another individual to address the major transitions or thresholds that the individual is facing and to deal with them in a developmental way."	Megginson (1994, p.165)
"*Mentoring is an intense interpersonal exchange between a senior experienced colleague (mentor) and a less experienced junior colleague (protégé) in which the mentor provides support, direction, career plans and feedback regarding personal development."*	Gibb (1994, p.1064)

Furthermore, mentoring is deemed to be a reciprocal and collaborative learning relationship (Nishida, 1990); a mutually beneficial interaction between the mentor and the mentee (Rock and Garavan, 2011); and linked to career success, personal growth, leadership development and increased productivity (Nishida et al., 1993; Rock and Garavan, 2011). Mentoring is about creating knowledge (Bryant, 2005). It provides an opportunity to externalise knowledge by turning tacit knowledge into explicit knowledge (Von Krogh et al., 2000) through the sharing and transferring of existing knowledge, in particular tacit knowledge and specifically institutional tacit knowledge, from the more experienced mentor to the mentee, resulting in the creation of new knowledge (Nonaka et al., 2000).

Key characteristics of mentoring are (a) mentors are more experienced than mentees in relation to a specific task; (b) mentors provide individualised support based on mentees' learning needs; and (c) mentoring involves an interpersonal relationship as generally indicated by mutual benefit, engagement and commitment (Abdullah et al., 2014).

Mentoring is therefore deemed by some to be a unique one-on-one learning relationship where fears and weaknesses and true selves can be shared and exceptional levels of personal growth, learning and discovery fostered (Ragins, 2016) once trust has been established. The learning and knowledge transfer that can occur in an effective mentoring relationship can be extremely beneficial. On the other hand, ineffective mentoring can be quite damaging to an individual by causing confusion and lack of direction.

There are many ways to view mentors, such as 'advisors', 'sponsors' or even 'informal friends'. Formal mentoring, on the other hand, is for a specific period of time with clearly established goals and objectives to be achieved during the mentoring relationship. For the protégé (mentee), the objective of mentoring is the "achievement of an identity transformation, a movement from the status of understudy to that of a self-directed colleague" (Healy and Welchert, 1990, p.17).

For me, mentoring is a mutually beneficial relationship where an experienced employee openly shares their work and life experiences with a less experienced colleague within the confines of a confidential relationship. It is a mechanism that openly permits and encourages both parties to draw on the more experienced employee's wealth of knowledge, which otherwise would be lost not only to individuals but to the organisation as a whole.

Although the use of the term 'mentor' has moved away from the 'guru' master-pupil relationship to one of collaborative problem-solving, the key principles behind the concept remain the same. By providing critical information about the organisation – the "ins and outs of corporate politics" (Ragins, 1989, p.4) – mentors play a key developmental role within the organisation and further enhance both the career and psychosocial functions of the mentee.

Relational mentoring claims to offers "a mutually beneficial relationship that meets members' needs while providing experiences of relational closeness, i.e., care, concern, responsiveness, vulnerability, emotional connection and commitment" (Ragins, 2016, p.17).

Creswell (2013) challenged researchers' varying definitions of mentoring and the implications of these definitions for the literature and asserted that throughout all the varying definitions, three common mentoring attributes have emerged that distinguish mentoring relationships: (i) reciprocity (mutuality of exchange); (ii) regular/consistent interaction over time; and (iii) developmental benefits linked to the mentees careers.

“Mentors are guides. They lead us along the journey of our lives. We trust them because they have been there before. They embody our hopes, cast light on the way ahead, interpret arcane signs, warn us of lurking dangers and point out unexpected delights along the way” (Daloz, 1986, p.17).

While it is possible for a mentor to provide guidance, support and encouragement, it is up to the mentee to learn or want to learn (Mathews, 2003). However, the claim that a mentoring relationship in itself can be a vehicle for achieving “midlife generativity, meaning a transcendence of stagnantly self-preoccupation” as proposed by Healy and Welchert (1990, p.17) is questionable.

As Nonaka and Takeuchi (1995) purport, knowledge is the most important asset a company owns. Knowledge is power, and not transferring or sharing this knowledge so that it can become valuable new knowledge for the individual and the organisation is careless.

2.3 Mentoring in higher education

Mentoring is not a new concept. Its origins can be traced back to Greek mythology when Odysseus entrusted the education of his son Telemachus to a wise counsellor – a mentor. Little has changed over the centuries, and the term is used in the organisational context in the same way. Singh et al. (2002, p.391) describe mentors as “individuals with advanced experience and knowledge who are committed to providing upward support and mobility to their protégés’ careers”. These individuals are usually well placed, well respected and hold positions of influence in the organisation. They have the knowledge and experience that equips them well to support the careers of less experienced individuals.

The traditional model of a mentoring relationship (Kram, 1985; Levinson et al., 1978) is a dyadic relationship in which a more experienced member of an organisation or profession takes an interest in a less experienced individual and provides both career and psychosocial support to that individual. Mentees (protégés) enjoy more positive career experiences than non-mentees with respect to both objective and subjective indicators of career success.

Throughout my research, I will refer to ‘protégés’ as mentees as, like Johnson (2015), I prefer the term. The definition of ‘protégé’ is ‘to protect’ and so lends itself to the old tradition of the mentor being the ‘wise old man’ passing on knowledge and protecting and preparing his ‘protégé’ for the world against the newer thinking of mentoring as a collaborative, mutually beneficial interaction between the mentor and the mentee.

Twenty years ago, Clutterbuck and Megginson, mentoring gurus, set out that mentoring was one of the fastest-growing forms of management development; the strongest growth area in mentoring was at director level at that time (Clutterbuck, 1985; Megginson and Clutterbuck, 1995; Clutterbuck and Megginson, 1999). This has since

grown, with mentoring being utilised as a positive development programme/partnership across all levels within organisations, a key forum for the exchange of knowledge between employees. It offers a reflective space – a 'ba' – where the mentee can take responsibility for and discuss their development. High-quality mentoring can be promoted by fostering a 'relational mentoring culture', which values employee learning, growth and development (Ragins, 2016).

The "types and goals of mentoring programmes and the assumptions underpinning them vary greatly" (Angelique et al., 2002, p.197); while there is much written about mentoring in the context of a student being mentored by a member of faculty (Sorcinelli and Yun, 2007), there is less written on formal staff mentoring schemes within the HE sector.

Universities that are sometimes "billed as utopia-like ivory towers, offering employees privilege and sanctuary from the demands of the real world" are often "more dystopian than utopian" (Angelique et al., 2002, p.195), where senior academics feed off graduate assistants and untenured and tenure-track faculty members (Boice, 1992). This can be especially true of small universities, branch campuses and interdisciplinary departments and can result in new tenure-track faculty falling through the cracks (Boice, 1992). Such isolation and resource scarcity can have debilitating effects on new, tenure-track faculty members' morale, postgraduate school adjustment and prospects for acquiring tenure (Boice, 1992). Perhaps to deal with the growing concern for incoming untenured faculty, formal mentoring schemes within the sector have been on the increase in recent years.

The research shows that mentoring takes place on a number of levels within HEIs. Mentoring takes place within departments, where a senior member mentors a more junior member, and across faculties and departments (the focus of my research) in formal mentoring programmes, where the matching is co-ordinated formally by the mentoring scheme co-ordinator. This avoids exploitative situations where the mentor can take advantage of the mentee by having unrealistic expectations or placing excessive demands on their time (Angelique et al., 2002).

We have seen the expansion of mentoring in recent years with the introduction of competencies and vocational qualifications for those wishing to become practitioners; many third-level institutions offer postgraduate and professional qualifications in the field. The emergence of 'peer mentoring' in HE has seen faculty with mutual interests and common stature form dyads to share job-related information, career strategies and emotional support (Campbell et al., 2000; Smith et al., 2001).

Many studies on workplace mentoring (Kram and Isabella, 1985; Clutterbuck and Ragins, 2002; Dutton and Ragins, 2007; Zellers et al., 2008; Rock and Garavan, 2011; Janssen et al., 2018; Ragins, 2016) have emerged alongside this evolution in

mentoring. However, the focus has primarily been on mentoring in business as opposed to mentoring within the HE sector, which is the focus of my research.

'Musing' is another type of mentoring proposed by Angelique et al. (2002), which "is a process of creating peer communities that facilitates connections between naturally developing relationships, shared power and collective action" (Angelique et al., 2002, p.196). While this constitutes an area of interest, particularly in the HE sector, it is not something I explore within my research.

Interestingly, it is often assumed in traditional mentoring that the mentor is more senior or of 'unequal status' to the mentee (Bozionelos, 2004). Age is not a given in relational mentoring, and while mentoring can occur between members of equal status and age, the mentor will have more experience than the mentee. I certainly challenge the thinking that the mentor is always older and wiser. For me, the experience of the mentor and their success in the institution is far more important than their age. Frequently, you might have a case where the mentor is younger than the mentee but has more experience at a senior level. While the mentor might have more experience, the skilled mentor today ensures not to use this power in a negative way, and where good relationships are established, the mentor "steps down from her pedestal of power and approaches the relationship from a position of vulnerability and mutuality" (Ragins, 2016, p.5). By relinquishing traditional hierarchical roles, the relationship becomes a vehicle for mutual learning, growth and discovery (Ragins, 2016). To me, while the matching process continues to be traditional, i.e., hierarchical in nature, the relationships certainly have more of a relational focus, which mutually benefits both mentor and mentee.

In conducting a review of the literature, I reviewed qualitative and quantitative studies undertaken in the University of Adelaide, Virginia Polytechnic Institute and State University, the University of Toronto at Mississauga, the University of Western Australian, the University of Queensland and Queen's University Belfast to ascertain the effectiveness of mentoring and to observe whether any key outcomes (intrinsic or extrinsic) were experienced by participants. While some studies looked at the extent to which faculty members mentor other faculty members and/or postgraduate students in the HE sector (Merriam et al., 1987; Sands et al., 1991; Woodd, 1997; Bhopal and Brown, 2016), few concentrated on the outcomes of the relationships. Zellers et al. (2008), who looked at formal mentoring programmes within academia in the United States, concluded that academe should be cautious from over generalising the findings conducted in corporate cultures and suggested that more rigorous investigation of mentoring in HE is warranted.

While all the studies set out have contributed greatly to our understanding of how the HE sector has embraced mentoring, little empirical work on the impact of mentoring relationships on knowledge has been conducted. By establishing what the knowledge-based perspective of formal mentoring in HE is, my research will, I hope, provide a new

lens and contribute to a greater understanding of formal mentoring from such a perspective (Nonaka and Takeuchi, 1995) (Figure 2.3).

2.4 A knowledge-based view of mentoring in HE

In trying to understand how organisations actually create and manage knowledge dynamically, Nonoka, Toyama and Konna developed a model of the knowledge-creating process. Figure 2.3 below illustrates the interactions between (i) the SECI process: knowledge creation through the conversion of tacit and explicit knowledge; (ii) 'ba': the shared context (place) for knowledge creation; and (iii) knowledge assets: the inputs, outputs and moderators of the knowledge-creating process (Nonaka et al., 2000). My particular focus is on the SECI process – the process that takes place in 'ba', where knowledge, once created, becomes new knowledge.

Figure 2.3 The three elements of the knowledge-creating process

In the context of providing education to students, creating knowledge is obviously something HE personnel excel at. Understanding the dynamic process of knowledge creation and sharing within an effective mentoring relationship where knowledge is both created and shared is key to my research.

Taking the three elements of the knowledge-creating process, the following sections look at the mentoring context (the 'ba'), the mentoring process (the SECI process), the mentoring outcomes (the moderators, the facilitators, the inputs and outputs and the growth and shift through the continuous knowledge conversion process). The chapter concludes by addressing how the key themes identified within the mentoring process influence the mentoring outcomes.

2.5 The mentoring context

Influenced by the SECI model as set out in Figure 2.1, this section looks at the mentoring context (Figure 2.4), the socialisation aspect, the face-to-face sharing the 'ba'. According to the theory of existentialism, 'ba' is a context, which harbours meaning originally proposed by the Japanese philosopher Nishida (1990) and then further developed by Shimizu (1995); a shared space – physical, virtual, mental or a combination of all three – that serves as a foundation for knowledge creation and emerging relationships (Nonaka and Konno, 1998), an idea platform for mentoring to take place, which is why I have chosen to use and adapt this model. 'Ba' is a tacit knowledge-enabling collaborative space, physical or virtual, where participants feel safe and exchange insights. Thus, 'ba' can be considered as a shared space that serves as a foundation for knowledge creation and for emerging relationships (Lincoln and Guba, 2000). It is the place (context) in which tacit knowledge is converted and that invests the team with the ability to make creative discoveries of new products (Mowday et al., 1979; Nonaka and Konno, 1998) and new knowledge.

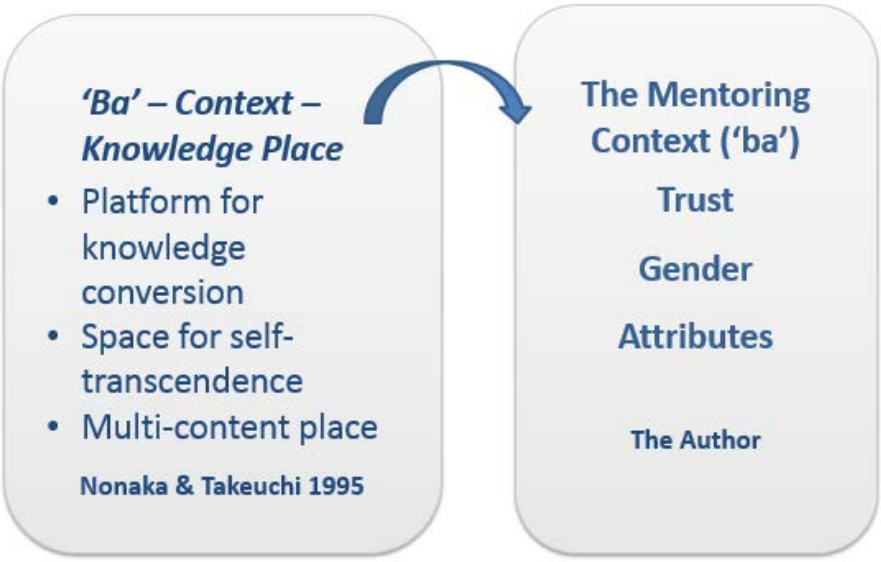

Figure 2.4 The mentoring context

This space can be physical (e.g., office, dispersed business space), virtual (e.g., email, teleconference), mental (e.g., shared experiences, ideas, ideals) or any combination of these. 'Ba' provides a platform for advancing individual and/or collective knowledge through knowledge sharing. Mentoring as a 'mental space' provides an ideal platform for promoting the SECI process by providing the 'ba' - the time and space necessary to facilitate the creation of new tacit knowledge through shared experience in a relationship of trust. Figure 2.4 sets out the key components of the 'ba' context to be considered for mentoring: (i) mentoring and trust (2.4.1.1); (ii) mentoring and gender (2.4.1.2); and (iii) mentoring attributes (2.4.1.3).

As set out earlier in this chapter, while much has been written about mentoring in the business community, there is less research on formal staff mentoring in HE. According to Sands et al. (1991, p.175), "it is not known how prevalent the practice is or whether the relationships that develop are actively sought by junior faculty members, fostered by mature scholars, evolve naturally or are the products of policies promoted by some department". It is not surprising, therefore, that researchers have continued to call for research that looks deeper inside the mentoring relationship to learn more about the micro-processes that help mentees to grow, learn and develop leadership skills (Fletcher and Ragins, 2007). Such knowledge would help us to more fully understand the type of learning that takes place within the mentoring relationship with a view to developing a more holistic and in-depth understanding of mentoring, mentoring relationships and the dynamics involved (Scandura and Williams, 2001; Zellers et al., 2008).

A recent survey by Bhopal and Brown (2016) explored the existence of formal and informal mentoring schemes within HEIs in the UK; 78 (of 127) survey participants stated that formal mentoring systems existed in their institutions while 28 stated that they did not have a system in place. The focus of Bhopal and Brown's research was to explore the successful career trajectories of senior black and minority ethnic leaders in HEIs and to establish how many had been supported through formal or informal mentoring. It was interesting to encounter such a new study because throughout my own research, I found that the intersectionality between mentoring and gender (a focus of my study) and mentoring and other forms of potential inequality, such as ethnicity, required further investigation. Unfortunately, my own research did not provide the scope to look at both aspects. However, it is clear to see that it is an area of great concern within the sector – the Athena SWAN framework now requires institutions to consider how various forms of inequality are interconnected for minority women and under-represented groups.

2.5.1 Mentoring and trust

Throughout the mentoring and development literature, the need to establish trust to ensure effective mentoring resounds with the perception of mentoring as a vehicle for reciprocal learning and effective knowledge transfer (Bozionelos and Wang, 2006; Greenhaus et al., 2009; Fleig-Palmer and Schoorman, 2011) when trust is established. High-quality mentoring creates safe havens where members feel accepted, supported and validated (Ragins, 2016).

Mentoring is seen to create possibilities and to provide guidance and support to others in a relationship of trust; "it includes facilitating, bringing visions to life and enabling people to achieve" (Cranwell-Ward et al., 2004, p.18). Establishing trust involves the willingness to be vulnerable; it can be developed through openness and personal disclosures, which allow both mentor and mentee to be vulnerable with each other. Of course, sharing fears, personal beliefs, struggles and aspirations, disclosure involves

risk to both parties, but the greater the risk, the greater the opportunity to build that essential trust for an effective mentoring relationship (Kram and Isabella, 1985; Dutton and Ragins, 2007; Ragins and Verbos, 2007; Ragins, 2016).

The literature sets out that trust is a characteristic valued by mentees – most mentees perceive that mentors have a reputation of being "trusted, respected, liked and admired" (Burke, 1984, p.400). Trust and disclosure builds the quality of the mentoring relationship over time. Mentors and mentees develop trust by engaging in mentoring episodes that challenge their relationships in ways that test and strengthen their commitment to the relationships with each other. However, this is not without concern as there is genuine fear that if a mentee conveys to a mentor their weaknesses and then encounters the mentor as a promotions or recruitment board member, they cannot but feel that they have left themselves slightly exposed. Trust, therefore, is paramount.

How trust is established within formal staff mentoring programmes and the type of mentoring attributes that are necessary to establishing this trust are addressed in Chapter 4. With relationships moving through four phases: initiation, cultivation, separation and redefinition (Kram and Isabella, 1985), gaining trust can take time. Empirical data support this proposed trajectory (Chao et al., 1992) with the initial phase lasting about six months and the cultivation phase lasting from two to five years. However, where you have a formal scheme with a definite timeline, mentors and mentees do not have this time to allow the relationship to go through the cultivation stages, which means that the mentee and mentor need to establish trust from the outset. Training can certainly help mentees and mentors in this regard by developing positive mentoring relationships through "introducing the pairs to what high-quality mentoring relationships do (relational behaviours), what they provide (relational outcomes) and their unique dynamics (co-learning, fluid expertise, safe havens, trust and commitment)" (Ragins, 2016, p.14).

There is evidence that choice leads to a more 'comfortable' scheme whereby mentees want to be involved in the choice of their mentor (Merriam, 1983; Woodd, 1997). According to Merriam (1983, p.171), "Forced matching of mentors and protégés ignores a characteristic crucial to the more intense mentor relationships that the two people involved are attracted to each other and wish to work together" (Merriam 1983, p.171). The issue of the pair's compatibility is particularly important in formally established mentoring and other developmental relationships (Rock and Garavan, 2011).

A range of studies in the literature (Hislop, 2003; Smith and McKeen, 2003) suggests that the presence of close and trusting relationships and strong ties with the organisation can improve the ability of individuals to transfer tacit knowledge. Although social relationships can play a part in the transfer of tacit knowledge, prior research on skill acquisition and implicit learning in the psychology literature suggests that greater attention should be given to the role of experiences in the transfer of knowledge.

2.5.2 Mentoring and gender

In the academic environment, there have been reports of continued marginalisation of women faculty members, and the culture of academia has been described as less than hospitable to women as they attempt to navigate the various aspects of their positions and environments (Hamrick, 1998; Hopkins, 1999; Gibson, 2006). Women frequently view themselves as 'outsiders' and feel isolated (Rios and Longnion, 2000), marginalised and constrained by the structure and political climate of the institutions they work in; they can feel excluded from informal mentoring partnerships (Burke and McKeen, 1997) and outside responsibilities.

With women totally under-represented at the most senior levels across the HE sector, the evidence speaks for itself. In Ireland in 2016, for example, 54% of staff in the sector were women but only 21% of full professorial and 29% of associate professorial positions were held by women (HEA 2017). At least this is an increase on 2015 numbers.

Only 29% of the highest-paid (≥ €106K) non-academic staff in universities are women, and outside of the case study institution, no executive management team comprises at least 50% women, which is the case in the case study institution. These statistics can have a negative effect on more junior, less experienced women by making them feel that reaching such levels would be exceptional.

In a gender survey conducted in 2015 by the Higher Education Authority (HEA) in Ireland, of the 4,835 survey respondents (68%F, 32%M), 56% (64%F, 36%M) responded that there was gender inequality in the Irish HE sector. These responses did not just come from women in the sector but also from men who have seen discrimination and inequality first hand. Comments in the table below give an idea of the toxic culture that prevails in some HEIs in Ireland.

Table 2.2 HEA review of gender equality in the Irish HE 2015 comments (HEA 2017)

"The macho misogynistic culture is pervasive in both the academic and administrative sides of higher education. This is often masked by the success of a small number of very accomplished women." [male, management, full-time, permanent/multi-annual]
"Irish academia is twenty years behind its counterparts in terms of 'jobs for the boys' and the 'boys' club'. It is laughable." [female, academic, hourly paid]
"The attitude of the 'alpha male', particularly those of an older generation, towards female members of staff differs to their attitudes towards other males. Mature female lecturers have been referred to as 'little old ladies'." [female, academic, full-time, permanent/multi-annual]

"Residual sexist attitudes are rife throughout the system." [male, academic, full-time, permanent/multi-annual]
"I do not understand why more females are qualifying with first class honours and yet often male candidates are given the jobs." [female, academic, hourly paid]

Further comments received on the under-representation of women on senior executive boards, recruitment competitions, conference keynotes, review boards, etc. are also worth noting and are given below.

Table 2.3 Comments on the underrepresentation of women in the Irish HE sector

"The senior academics are all male including one in a management position who states he 'would prefer to work in an all-male environment'. He is an appointed institutional representative for the Athena SWAN initiative!" [female, academic, full-time, permanent/multi-annual]
"Women are excluded from leadership positions, […] interview boards and university committees. E.g. a female colleague who asked to go on an interview board was told she would not be needed as 'they already had a woman'." [female, academic, full-time, permanent/multi-annual]
*"Women are systematically ignored for promotion, not included on senior committees and our current Head of Department has said that he regards Athena SWAN as 'bull****'. Because of this endemic bias I plan to leave [HEI] and Ireland."* [female, academic, full-time, permanent/multi-annual]

Throughout my research, the importance of mentoring and gender has been prevalent. The lack of visibility of senior women within organisations can have a negative effect on more junior, less experienced women. Identifying successful leaders (of both genders) to act as mentors or role models can support women to build networks and confidence and go for senior leadership roles. When asked what advice senior academic women would give young women starting out on their academic careers, the senior women recommended seeking a mentor or joining a network (Gerdes, 2003). Women benefit particularly from mentoring as it can increase their visibility, bestow greater legitimacy and allow access to key males executives (Wirth, 2001).

This certainly holds true in a study of 400 professional women where the researcher (Collins, 1983) found that the mentees saw their mentors as a source of support and encouragement and were viewed as instrumental in increasing their confidence in addition to providing 'growth opportunities' and visibility in the organisation (Ragins, 1989), thereby expanding their social capital through engagement in new networks.

High-quality mentoring relationships are particularly important for employees who are in minorities (Bhopal and Brown, 2016) because 'supporters and champions' are created through mentoring relationships. Most importantly in my mind, mentoring provides that essential "space for men to hear women's stories" and changes "men's understanding of gender and the gendered organisation" (Vries et al., 2006, p.586). My own personal mantra is that without engaging men in the conversation, little will change.

Much of the feedback on mentoring in HEIs, particularly from women, is that it can be difficult to access mentors (Angelique et al., 2002; Pololi and Knight, 2005; Sambunjak et al., 2006; Darwin and Palmer, 2009). Establishing whether women, in particular, benefit from mentoring is further investigated in Chapter 4.

I am intrigued by Professor Tom Schuller's newly coined 'Paula Principle' (Schuller, 2017) following on from the 'Peter Principle' where men, he posited, are promoted beyond their competence and where he argues that women work below their level of competence with many elements, such as childcare, elder care, lack of mentorships and everyday sexism, holding them back. According to Schuller, men do exactly the opposite, effecting not only top-ranking women but women operating at all levels of their professions. However, Schuller adds that women are adverse to putting themselves forward and choose to stay where they are rather than move up to the next level. I totally disagree with his thinking on this because for me, women are just as ambitious as men to reach higher levels in the organisation; my experience is that women certainly do not work below their competence levels but instead, systemic barriers and, at times, lack of self-belief in the workplace stop them achieving their goal.

For those who participated in the Queen's Gender Initiative Mentoring Scheme in Queen's University Belfast, findings (unpublished) show that 75% of mentees and 84% of mentors progressed subsequent to their involvement in the scheme. One cannot attribute this success solely to mentoring but it certainly was sighted as having had a positive impact on their progression. Subsequent research has reinforced the empirical connection between mentoring and a range of positive professional career outcomes (Johnson 2015). Johnson argues that mentoring begets mentoring, and those with the most experience of mentoring are more likely to be mentor themselves. Excellent mentors often have a profound impact on both an institution and a profession (Johnson, 2007), which ensures that current intellect flourishes in future generations.

Schuller sets out that there are five key points that explain the Paula Principle (PP), three of which are direct discrimination, structural reasons (such as the expense of childcare) and psychology (in terms of women often lacking the self-confidence to put themselves forward for positions, even when they are very well qualified). Men, by contrast, are ready to apply even when they lack the official requirements. Unless women meet all the requirements of the post, they tend to opt out, saying they are not suitably qualified; men, on the other hand, 'give it a go'. Schuller's fourth PP is the lack

of ‘vertical networks’ – there are fewer people in higher-levels jobs who can help with mentoring and information (Schuller, 2017).

The fifth ‘PP’ is ‘positive change’, where women, in fact, make a decision not to rise to the top. Schuller says that women may opt for a better quality of life and choose not to get involved in the stresses and strains of working at full or overextended capacity. Instead, they look for jobs in sectors that provide the satisfaction of working with people and often opt for lateral rather than vertical moves. I certainly do not agree with this thinking. Women may take these options but rarely by choice. Schuller, however, does feel that ignoring the lack of opportunity for women in achieving their full potential is not only robbing women of opportunities but also robbing the business world of the best people. Changing this, he argues, will not be robbing Peter to pay Paula but taking a step towards greater equity and more efficiency (Schuller 2017).

The Institute of Leadership and Management (ILM) research found that 73% of women managers believe that barriers prevent them from progressing to top levels – the glass ceiling (Bodsworth, 2011). The ILM found that not only were traditional barriers such as maternity leave and childcare-related issues contributing factors but that ‘lower ambitions and expectations’ and lack of clarity around the career ambitions were also key factors. The institute’s research of 3,000 managers (men and women) reveals that women managers are impeded in their careers by lower ambitions and expectations and that compared to their male counterparts, they tend to lack self-belief and confidence. These are findings I certainly challenge.

I agree that lack of confidence may hold some women back from applying for jobs or promotions in contrast to their male counterparts, who will apply for roles even if they only partially meet the requirements. However, I do not agree that women lack ambition. In addition to their initial greater success at school, women are adding additional skills at a faster rate than men. Providing women with access to good mentors will certainly go some way to achieving the objective of getting more women to go forward for promotion. Schuller (2017) proposes that we think less of the career ladder as the only career trajectory but more in terms of a ‘career mosaic’ that offers several different pathways, including expanded guidance and support for women with their own careers.

However, alongside these reports, much of the feedback on mentoring in HEIs, in particular from women, is that it can be difficult to access mentors (Angelique et al., 2002; Pololi and Knight, 2005; Sambunjak et al., 2006; Darwin and Palmer, 2009). Groysberg (2008) feels that the lack of access to mentors is a significant barrier to women's career progression because the women are likely to be denied access to important information shared by the dominant group. Utilising mentoring schemes to provide this access to very senior women is one way for an organisation to change the mindsets and support more junior, less experienced women to develop confidence and raise their aspirations to become senior managers and leaders within the organisation.

Looking at mentoring as a support with research outputs, Goldstein (1979) found that PhD students with same-sex mentors published significantly more than did those in cross-gender role situations. In addition, those who had a mentor were found to be earning more than those who did not, attaining higher levels of education and following a specific career plan and to be more satisfied with their careers (Dreher and Cox Jr, 1996). In a study of 133 mentored faculty members (64F, 69M), Cameron (1978) found that women published less than men and that women were not included in networks that led to publications as frequently as men. However, women who collaborated with others were as successful as men when measuring the number of publications and successful grants received. Mentoring can certainly support these collaborations by opening up networks and other channels of communication otherwise not accessible to women.

An issue identified by Gibb and Megginson (1993) is that male mentors are less sensitive to the feelings and perceptions of female mentees, which is perhaps why some female mentees specifically request a female mentor. Establishing the experience of women within the case study institution will hopefully add to this research, which is gaining traction at a considerable rate – organisations throughout the world are finally placing gender equality high on their agendas.

Clawson and Kram (1984) noted that those faced with cross-gender mentoring are faced with two tasks: (i) managing the internal relationship between the mentor and the mentee and (ii) managing the external relationship between the dyad and the rest of the organisation.

The literature addresses differences in outcomes depending on the gender of the mentor. For example, Ragins (1999) found that female pairs cite more psychosocial aspects and opposite gender pairs utilise the relationship more effectively. In a study conducted by Vries et al. (2006), the researchers did not find this difference to be the case; many respondents in that study cited rapport, friendship, trust and confidentiality as being present in their mentoring relationships, regardless of the gender of the mentor.

An April 2017 research article in the *Irish Independent* (Sweeney, 2017) set out that research undertaken by Catalyst Consulting shows that women are hired for their experience while men are hired for their potential. This is so discriminatory because women are expected to bring their experience to the table while men are judged on the basis of the potential expertise they can bring to the table. Time and time again I have personally heard at interview that it is too early in a person's career for them to make the jump. Ninety-nine percent of the time, this is attributed to younger women and rarely, in my experience, to young men, who, as Catalyst's research shows, are considered for their potential. Furthermore, Catalyst found that despite women aspiring equally to men, women tend not to be asked career-changing questions, such as whether they would re-locate to another country, assuming that if they have young

children they would not be in a position to. While we all want to believe that the workplace is a meritocracy and people are judged for the calibre of their work, this has been proven not to be the case; frequently, the person who has been more visible in the organisation rather than the best is the person who secures the role. Rather than asking the question "What can 'women do to get ahead?", organisations need to ask what they can do to enable women to reach their potential. Not having access to the same 'old boys club' as men certainly appears to disadvantage women.

Overall, Schuller sets out that as women have superior educational qualifications, we cannot afford to ignore the dissipation of talent at every level implied by the Paula principle. The statistics speak for themselves: Irish women perform better than men in education (HEA), but in Ireland in 2015, there was a 14.8% difference in median pay between men and women; the OECD (Organisation for Economic Co-operation and Development) cited a 16% difference even where women are more qualified. Changing this will not be robbing Peter to pay Paula but will represent a step towards greater equity and more efficiency (Schuller, 2017).

It is crucial to engage men in the conversation, and one such way of doing this is through mentoring. Gibson (2006) suggests that HR has a role to play in formalising mentoring for women academics as a means of fostering transformation and change in academic institutions. I strongly advocate that senior women in academia must not be content with merely mentoring others or "passing the torch" but "must also use their positions to influence institutions – until the academic structures fit women as well as men and until women's issues truly become people's issues" (Gerdes, 2003, p.269).

Establishing a mentoring culture that commits to the success of its faculty, including women and minorities, has a potential role in transforming the academy (Gibson, 2006) and equipping women to challenge "the marginalising practices of the gendered organisation in which they work" (Vries et al., 2006, p.576). Gathering a clear understanding of what women look for in a mentor and the outcomes they have experienced will help inform the research in this regard.

Women and mentoring in HE could, in fact, form a thesis all of its own. For the purposes of my research, I addressed just some aspect of the connection between women and mentoring by considering if more women than men seek a mentor. I considered if and why women tend to look for female mentors and whether there is any connection between having a mentor and extrinsic outcomes such as promotion. I present the findings in Chapter 4.

2.5.3 Mentoring attributes

In her study, Cameron (1978) found that the stature and prestige of the mentor were important to the academic productivity and advancement of the mentee. To be an effective mentor, there are certain attributes that a mentor must possess, such as being supportive, challenging, non-judgemental, listening skills, the ability to offer different

perspectives and to disclose facts, feelings and opinions to help to build rapport, trust and empathy with the mentee (Clutterbuck and Ragins, 2002; Rock and Garavan, 2011; Bhopal and Brown, 2016). Mentors should have experience and be able to relate to a broad range of issues that the mentee might present. A mentor should be able to see patterns of behaviour and, most of all, be trustworthy and treat the information shared as strictly confidential.

The ability to empathise with the mentee on personal circumstances was highlighted by (Nielson et al., 2001). Clutterbuck and Ragins (2002) identified mentee behaviours that are often overlooked, such as clearly expressing a developmental need and then actively helping to articulate expectations and own goals and objectives from the relationship, seeking and accepting constructive feedback, demonstrating a commitment to follow through, seeking to understand expectations and boundaries, being open and trustworthy and maintaining confidentiality.

I am firmly of the opinion that mentors need skills and attributes to mentor effectively. There is an art to mentoring. It is not just about being a good listener – it is about having the ability to be reflective and provide worthwhile constructive feedback. According to Rock and Garavan (2011, p.121), “Feedback enables individuals to become more reflective, to develop deeper levels of consciousness and to change behaviours where appropriate”.

As set out earlier, mentoring attributes have emerged that distinguish mentoring relationships: reciprocity (mutuality of exchange), regular/consistent interaction over time and developmental benefits linked to the mentees careers (Creswell, 2013; Daloz, 1986). One needs to mentor with purpose. Having personally mentored a number of staff through the formal mentoring scheme, it is easy to see how one-to-one mentoring meetings can become ‘just nice conversations’. For mentoring to be effective, it must have a purpose. However, some mentors lack these skills and demonstrate poor emotional intelligence, lack of connection, lack of listening skills, etc. On the other hand, others basically want to ‘clone’ the mentee into themselves and often see themselves within the mentee. Others are too busy to be bothered (Johnson, 2015).

Dougherty and Dreher (2007) point to the Ramaswami and Dreher (2007) model, which proposes that mentor attributes, such as knowledge about organisational politics and culture, skill to provide assistance, and hierarchical position will determine mentor quality. The mentor’s ability to perceive what the mentee most needs and to then deliver developmental solutions is another way of assessing the mentoring relationship. The research question as to what key attributes mentors bring to the mentoring relationship is addressed in chapters 3 and 4.

Mentor knowledge about organisation politics and culture and the ability to perceive what the mentee needs are key attributes that, once in place, will result in positive outcomes from the mentoring relationship, none more than within the HE context where

organisation politics are rife. Understanding and learning how institutions operate at an early stage is key to whether individuals succeed or not within this environment.

As is the case for the mentor, the mentee also must possess certain attributes, such as having positive personality characteristics, emotional intelligence, motivation, competence, coach ability and initiating behaviours (Johnson, 2007). While primarily focusing on mentoring between students and faculty members, Johnson (2007) argues that the mentor and mentee must, together, track progress, clarify expectation and set our career goals early in the process. Establishing which key attributes were of the utmost importance in the mentoring relationship forms part of my research.

2.6 The mentoring process

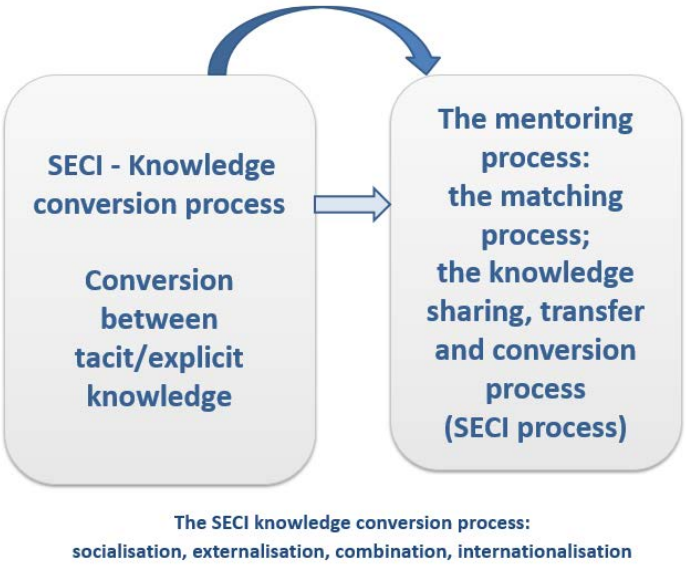

Figure 2.5 The mentoring process

Figure 2.5 presents the mentoring process, a key component of my knowledge-based view of formal mentoring in HE (Figure 2.1). As set out earlier in this chapter, for mentoring to be effective, trust must be established. For trust to be established, there must be compatibility between the mentoring pairs. There is certainly clear evidence in the literature that involving mentees in the choice of their mentor leads to a more effective compatible relationship (Woodd, 1997; Rock and Garavan, 2011) and a more 'comfortable' scheme. Therefore, the matching process is key to establishing an effective mentoring relationship. If the matching process is not enabled, there cannot be knowledge sharing. The next section will address the matching process, which I propose is a key enabler to the SECI process – knowledge conversion process – within the mentoring relationship.

2.6.1 The matching process

Gardiner et al. (2007) maintain that a good mentoring programme requires effort to get it established and to ensure that participants are well matched, know what their role is

and are properly supported through the programme. The matching process within a formal mentoring programme can certainly take that time.

While mentoring happens on many levels within a HE context, particularly between students and supervisors, peer and formal relational/traditional mentoring is where faculty with mutual interests, often in different disciplines, are matched together to share job-related information and career strategies and to provide each other with emotional support (Campbell et al., 2000) in one-to-one dyadic pairs.

Kram and Isabella (1985) identified the following three peer mentoring relationship types: (i) information peer for information sharing, which I consider to be more like a buddy-type relationship; (ii) collegial peer for career strategy and job feedback, which typically would involve someone's manager or head of department but would not involve performance-related feedback or support; and (iii) special peer for emotional and special personal support, which is quite different to my understanding of mentoring in the HE context. In addition, Parsloe (1992) identified is the professional qualification mentor.

There is some evidence to suggest that informal mentoring may, in fact, be more effective than formal mentoring where the mentoring relationships occur naturally. I am not convinced. There might be an issue within a formal mentoring programme in situations where participants are matched by a scheme co-ordinator; where mentors, at times, feel coerced into participating; where participants might be confusion about role expectations (Kram and Isabella, 1985) or where people might feel pressurised by the organisation to display citizenship behaviours (Ragins, 1999) by acting as a mentor rather than openly volunteering to be one. However, where mentors volunteer to engage in a formal scheme, my sense is that formalising the matching process leads to more effective relationships.

Further investigation in the matching process was undertaken within the research to gather feedback directly from mentors and mentees as to the effectiveness of the matching process.

2.6.1.1 The mentoring relationship

The literature alludes to a mentoring relationship as one of the most complex and developmentally important relationships a person can have in early adulthood. Traditionally, the mentor was seen as a teacher, adviser, confidant or sponsor, usually several years older and with greater experience and seniority than the younger mentee. The changing role of the mentor from the hierarchical teacher role allows the mentor to be more effective (Ragins, 2016). Relational mentoring provides a space (a 'ba') where both mentor and mentee can mutually discover, learn and grow from the relationship (Ragins, 2016).

Relational mentoring is a theoretical perspective that explains how and why mentoring relationships become high-quality relationships. Influencing change and keeping their 'finger on the pulse' of what is going on with the younger generation appears to be a key reason why people choose to mentor.

Social capital theory also contributes to our understanding of mentoring by helping to explain how and why developmental relationships emerge (Gubbins and Garavan, 2016). Social capital (social participation and engagement) within mentoring is that social engagement where individuals can draw from the mentor's experience (the 'bonding' type of social capital). Harney (2012) suggests that individuals in developmental relationships engage in the signalling of identity (knowing why), the signalling of performance (knowing how) and the signalling of social capital (knowing whom). "Social capital operates through features of social organisation such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit" (Sosik and Lee, 2002, p.67).

Mentoring is defined "not in terms of formal roles but in terms of the character of the relationship and the functions it serves" (Levinson et al., 1978, p.97). Levinson's pioneering study in the 1970s was the first to suggest that "good developmental mentoring relationships promote socialisation, learning, career development and preparation for leadership in those that are mentored" (Levinson et al., 1978, p.97). However, what differentiates mentoring from other types of developmental relationships such as 'coaching' is often misunderstood, and the distinction between the two often remains blurred (Hamlin and Sage, 2011). While mentors coach within the mentoring relationship, coaching is quite a different intervention.

The word 'sponsor' is often intertwined with the word 'mentor'. In traditional mentoring, the mentor is expected to sponsor and open doors for the mentee and advise the mentee on progression, etc. What is expected in return from the mentee is loyalty; the mentor sometimes gains status and a sense of satisfaction but is not expected to learn or grow. I really struggle with the intertwining of sponsorship and mentorship as I personally see them as two quite distinct interventions. While sponsorship is an important career support function of informal mentoring and involves public support for the mentee in the form of actively nominating the mentee for lateral moves (Kram and Isabella, 1985), in my opinion, acting as a sponsor for an individual is quite different to acting as a mentor.

Moving from the traditional hierarchical type of mentoring to relational mentoring sees the mentoring relationship becoming a "vehicle for mutual learning" (Ragins, 2016, p.5) and knowledge transfer. Relational mentoring theory purports that the use of communal norms where mentors and mentees give to each other based on need without the expectation of getting something back is a key marker that distinguishes high-quality from average mentoring relationships (Clark and Mils, 1993). While relational mentoring does not dismiss traditional approaches to mentoring, Ragins (2016, p.5)

argues that a partnership-type relationship, which moves beyond the hierarchical teacher role and beyond the "one size fits all" approach to sharing knowledge, is far more effective in achieving desired change in the mentee.

Fostering a relational mentoring culture within organisations, where employees are encouraged and assisted in connecting with more senior experienced colleagues as part of their personal and professional development, is key to an effective mentoring culture. Leaders actively promote mentoring and "walk the talk" (Ragins 2016, p.240) by volunteering as mentors themselves. If organisations were to pay for one-to-one coaching of this kind for employees, the costs would be extensive. Tapping into the vast experience that exists in organisations through mentoring is invaluable. According to Clutterbuck (2004), by exposing talented employees to high-performing colleagues and stretching them to perform even better through mentoring can be the most cost-efficient and sustainable way of fostering and developing talent within an organisation.

2.6.1.2 The mentoring relationship (formal-informal mentoring)

Formal workplace mentoring schemes – the focus of this research – have become very popular across a broad spectrum of organisations, from multinationals to SMEs (small and medium enterprises) (Rock and Garavan, 2011). These organisations are of the opinion that such schemes provide personal development for performance enhancement, talent identification and development, socialisation and career development, mainly among managerial-level employees or ascending professionals (Allen et al., 2006).

The increasing popularity of such schemes is primarily down to a recognition that mentoring relationships are extremely beneficial and represent a very cost-effective way of providing employees with one-to-one support from more senior, experienced employees (Clutterbuck, 2004). Formal mentoring is a means of tapping into the wealth of knowledge (Swart et al., 2014) that our more experienced employees have and which would otherwise go unutilised. Formal mentoring is a mechanism for engaging our senior colleagues with our more junior colleagues and giving, for example, junior academics a feeling that they can formally avail of expertise from outside their own departments. Informal mentoring does not afford that access.

One of the most fundamental differences between formal and informal mentoring relationships (Ragins, 1999; Allen et al., 2005) is that formal mentoring relationships are more or less driven by organisations to fulfil organisational needs and desires while informal relationships are driven by individuals to fulfil individual needs and desires.

As was the case in the case study institution, formal mentoring programmes are usually developed with organisational assistance, involving the matching of pairs, scheduled meetings, the development of realistic expectations by the mentor and agreed topics to be discussed (Mathews, 2003). According to Reece and Brandt (1999), the most important reason to use formal mentoring is to ensure an organisation's culture is

transmitted and perpetuated. In contrast, informal mentoring relationships are developed spontaneously, without organisational assistance.

While I support informal mentoring, having had such a relationship during my career, I feel informal mentoring does not provide the access to very senior colleagues. While one might be lucky to develop such a relationship, that would most like occur on a 'who you know' basis.

If we view the workplace as a community, then mentoring can play a significant role in making workplaces better communities by "harnessing the spirit of the community" (Gibb, 1999, p.1064) and seeing formal mentoring as a form of volunteering for which there is no financial award but where mentors can express their altruism in undertaking the role. The literature purports that formal mentoring will succeed where there are strong communities (Gibb, 1999), as is the case within the case study institution, and where community members perceive mentoring to fit well with achieving "communitarian ends". Mentoring will fail where there is a "weak community", where there is little sense of responsibility for others and where commitment to the community is absent (Gibb, 1999, p.1065). Making a scheme mandatory runs counter to either a "social exchange" or a "communitarian base for developing a sustainable initiative" (Gibb, 1999, p.1071). All volunteer mentors will have calculated the opportunity costs in some way.

Another difference between formal and informal mentoring is that purely informal mentoring occurs when a relationship is formed solely through mutual attraction (Ragins et al., 2000). The relationship can manifest where "someone, other than your manager or immediate co-workers, …. provides you with technical or career advice, coaching or information on an informal basis" (Seibert, 1999, p.493). By contrast, formal mentoring is generally understood to begin when the organisation acts as the catalyst and assists in establishing, supporting or promoting the formation of the relationship and is likely to be instrumental to some extent in matching participants (Eby and Lockwood, 2005), which is the practice in the case study institution under review. Informal mentoring relationships are developed spontaneously, without organisational assistance; while evidence relating to mentoring in HE is "unsystematic and lacks integration" (Johnson, 2015, p.3), tracking the effectiveness of informal mentoring is even more difficult.

Formal mentoring schemes are implemented by organisations for many reasons, including socialisation, career and personal development (Levinson et al., 1978; Garavan and McCarthy, 2008; Rock and Garavan, 2011) and talent identification (Allen et al., 2006). However, as Gibb (1999) argues and which I have also experienced, as formal mentoring schemes in workplaces extend and develop, too much focus tends to be put on activities such as policy development, scheme design and training. Furthermore, too much emphasis can be placed on the preconditions for successful implementation rather than on substantive theoretical analysis to connect formal

mentoring development with salient theories and the broader implications these have for understanding formal mentoring in workplaces.

I have personally found that acting as a mentor within the HE sector is a form of contributing to the wider campus community and helping not only others but the mentor him/herself in the promotion process.

2.6.1.3 The motivation to mentor

There are many theories on what motivates an individual to mentor. The underlying and often unaddressed assumption in these studies is that mentoring has many possible effects for mentees and that costs are basically investments in terms of resources (time of both mentee and mentor and organisational costs). This approach may well be far too simple as it neglects to consider the possible self-serving motives of mentors. This is not unlikely to happen as mentoring typically is a voluntary activity and there are no standards or training mentors have to match. Therefore, as in any helping relationship, a potential risk is that mentors primarily are self-oriented and are willing to 'help' their clients based on their own idiosyncratic approaches, which can have some negative outcomes. The focus on the mentee has dominated empirical research on mentoring, despite suggestions to focus on both members of the dyad. Although researchers acknowledge that not all experienced organisational members become mentors (Ragins and Kram, 2007), relatively little empirical attention has been directed to identifying the factors that influence the propensity to mentor. This omission is quite puzzling given that willingness to mentor is a necessary condition for the initiation and development of mentoring relationships, and there is evidence that individuals differ in this regard (Scandura and Williams, 2004).

Research shows that employees are willing to go beyond their job requirements when they are committed to the organisation, are satisfied with their jobs, are given intrinsically satisfying tasks to do and/or have supportive or inspirational leaders (Bolino et al., 2002). The organisation is deemed to benefit substantially. According to the research, the mentor benefits through increased motivation and self-esteem brought about by being in a position to help someone new. Mentoring provides the mentor with opportunities to hone and improve their own management skills, particularly advisory and supporting skills, in a safe environment.

Mentees will inevitably develop mentoring mental maps that share their expectations, frame their experience and effectively dictate if and how they themselves will mentor in the future (Ragins, 2016). This, in turn, facilitates the ongoing conversion of tacit codes of ethical conduct and professional behaviours within the confines of the mentoring relationship.

In critiquing the literature, the lack of recognition, either formal or informal, afforded to mentors in recognition of the time they have freely given to support mentees in these development relationships was an area of concern. "Failure to prioritise development

relationships is exacerbated by institutional reward structures that fail to take account of the time engaged in relationships" (Johnson, 2015, p.16). Promotional systems fail to adequately acknowledge quality advising and mentoring within the promotions processes – funding and research publications and outputs are the primary determinants of advancement. Promotions boards rarely, if ever, scrutinise a faculty member's effectiveness in a mentor role. Part-time staff are also outside of this culture. Excellence in a mentor role should be more publicly acknowledged, just like excellent teaching is acknowledged through award schemes. Complementing teaching, research and service, mentoring is often referred to as the "fourth leg of the academic stool" (Jacob, 1997, p.485). We certainly need academic systems and formalised schemes that encourage, facilitate and reward excellence in the mentor role.

2.6.2 Mentoring and knowledge

Everyone is a novice at some point, and individuals will experience mini-learning cycles throughout their careers as they transition between and within organisations (Day and Allen, 2004). According to Bryant (2005), the mentoring literature has, to a great extent, "ignored the function of information and knowledge sharing" (p.320) and, in particular, "the role of peer mentoring in facilitating knowledge creation and sharing" (p.322), which play a significant role in the mentoring relationship. Furthermore, Wunsch (1994) found research on faculty mentoring programmes to be rare and unreliable and found studies in the area to be evaluative rather than research based.

My research focuses on the tacit dimension of knowledge and the creation of new knowledge through the dynamic process of knowledge creation, knowledge management and knowledge transfer within the mentoring relationship. Utilising the Nonaka and Takeuchi (1995) theoretical framework, this section takes an in-depth look at the concept of knowledge-sharing, particularly the creation of 'ba' – the socialisation aspect that enables the sharing of tacit knowledge within the mentoring relationship (Nonaka and Konno, 1998; Nonaka et al., 2000).

Knowledge without context is just information. Information given within a specific context, such as within the mentoring relationship, is relevant when interpreted and believed by individuals. Researchers have argued that mentoring relationships provide firms with a means of sharing knowledge and building intellectual capital (Scandura et al., 1996; Allen et al., 1997; Swart and Pye, 2002).

The theory of knowledge creation developed by Nonaka and his colleagues (Nonaka, 1994; Nonaka and Takeuchi, 1995; Nonaka et al., 2000) originated in studies of information creation in innovative companies. Knowledge creation is a spiralling process of interactions between explicit and tacit knowledge. According to Nonaka and Takeuchi (1995), knowledge-sharing takes place in four modes: socialisation, externalisation, combination and internalisation (the SECI process).

As Mowday et al. (1979, p.8) argue, knowledge is "created through interactions between tacit and explicit knowledge, rather than from tacit or explicit knowledge alone". The creation of knowledge and the sharing of knowledge within peer groups is sometimes forgotten. Within the HE sector, the environment is ripe for this process, which facilitates ongoing interaction between the institution's members – employers, employees and students.

How knowledge, tacit knowledge in particular, is transferred from the mentor to the mentee within the mentoring relationship is of interest. The sharing of knowledge is key to enabling an organisation to be effective (Zack, 1999) and competitively viable. Mentoring relationships are one vehicle through which individuals can enhance personal learning (Kram and Isabella, 1985). They can provide mentees with reflected power (Kanter, 1977), insights into organisational politics and access to information that is typically provided in the 'old boys network' (Ragins, 1989).

But firstly, what is knowledge?

2.6.2.1 What is knowledge?

Knowledge is a fluid mix of framed experiences, values, contextual information and expert insight that provides a framework for evaluating and incorporating new experience and information (Davenport and Prusak, 1998). Knowledge is a "dynamic human process of justifying personal belief toward the truth" (Nonaka and Takeuchi, 1995, p.58). It originates and is applied in the minds of knowers. Organisational knowledge includes all the tacit and explicit knowledge that individuals possess about products, systems and processes and the explicit knowledge codified in manuals, databases and information systems (Nonaka and Takeuchi, 1995; Bryant, 2005). In organisations, knowledge often becomes embedded not only in documents and repositories but also in organisational routines, processes, practices and norms (Näslund, 2002).

Knowledge has been defined as justified true belief that increases an organisation's capacity for effective action (Lincoln and Guba, 2000; Creswell, 2012). According to Toffler (1990), we now live in a knowledge-based society where knowledge is the source of the highest-quality power.

The positivistic view of knowledge is the theory that knowledge can be acquired only through direct observation and experimentation and not through metaphysics or theology that focuses on intellectual quantification and sees the world as an independent reality, connecting the information we gather with a person's own experiences and future expectations. Constructivists see knowledge as a unique and flexible process in itself (Swart and Kinnie, 2010). According to Colliver (2002, p.49), "The constructivist view is that knowledge claims are *justified* if we agree that they are useful in reaching our practical goals—rather than *verified* by proving that they correspond to reality".

There are two types of knowledge, explicit knowledge (know what) and tacit knowledge (know how). Individual tacit knowledge is insufficient on its own to create competitive advantage, and it is only when knowledge is shared at a collective level that the organisation can leverage the knowledge held by individuals (Swart et al., 2014). Knowledge is increasingly regarded as the critical resource of firms and economies, particularly more recently with the focus on tacit knowledge having an impact on organisational performance and its importance for sustaining firms' competitiveness (Lam, 2000, p.487; Shamsie and Mannor, 2013; Swart et al., 2014).

The epistemological dimension of explicit versus tacit knowledge demonstrates that human knowledge exists in different forms and can be articulated explicitly or manifested implicitly (tacit). The main difference is that explicit knowledge can be codified, abstracted, stored and understood without a knowing subject (Popper, 1972). In contract, knowledge that is tacit is "intuitive and unarticulated" (Lam, 2000, p.490) and cannot be understood without the 'knowing subject'.

"Tacit-to-tacit, or person-to-person, knowledge transfer is the most effective way to share tacit, complex knowledge" (Lee, 2000, p.418), which makes the transfer of such knowledge more likely to be understood and internalised by the receiver (Lee Endres et al., 2007), in this case the mentee, than the transfer of such information through written documentation. This is true in HEIs, where the creation, sharing and transfer of tacit and explicit knowledge lead to our key competitive positioning in the globalisation of education. I am certainly of the opinion that mentoring relationships can contribute to increasing organisational knowledge creation and sharing (Bryant, 2005) and can be a very effective tool for transferring information that can ultimately become knowledge.

2.6.2.1 Explicit knowledge

Explicit knowledge is just that – explicit; it is easy to transmit a piece of information verbally or visually. Explicit knowledge is articulated codified knowledge found in books, on the web and other visual and oral means. It is the opposite to tacit knowledge. It contains not only words but substances such as numbers, codes and mathematical and scientific formulae. In practice, all knowledge comprises a mixture of both explicit and tacit elements rather than just one or the other. My research interest is in tacit knowledge, particularly the importance of tacit knowledge within the mentoring relationship.

2.6.2.3 Tacit knowledge

As defined in the Oxford dictionary, tacit knowledge is implied but not expressed information; it is understood or implied without being stated openly. There are two dimensions to tacit knowledge, technical know-how and cognitive beliefs, ideas and values.

Polanyi (1967, p.4) termed the pre-logical phase of knowing as “tacit knowledge”. Nonaka et al. (2000, p.7) define tacit knowledge as knowledge that is “highly personal and hard to formalise”. It is the accumulation of experiences in a particular discipline that makes an expert an expert. As opposed to formal, codified or explicit knowledge, tacit knowledge is that ‘locked-in experience’, the kind of knowledge that is difficult to transfer to another person by means of writing it down or verbalising it (Polanyi, 1966). Tacit knowledge is found in subjective insights, intuitions, hunches and know-how and can often be acquired only through experience (Polanyi, 1966; Berman et al., 2002; Nelson and Winter, 2009; Swart et al., 2014).

The importance of tacit knowledge in organisation learning has become the focus of considerable attention in the literature (Nonaka, 1991), i.e., knowledge that just happens when sharing experiences, is not written down or formally verbalised but cab be transferred from one person to another. As Polanyi (1966) put it, “we always know more than we can tell” (p.4) and we tell more than we can write down. Polanyi argued that a large part of human knowledge is tacit, in particular when it comes to operations skills and know-how acquired through practical experience. Much of the attention given to tacit knowledge by management researchers stems from the idea that such knowledge is an important source of competitive success (Nonaka and von Krogh, 2009).

Tacit knowledge is acquired through practical experience, i.e., learning-by-doing. Tacit knowledge is personal and contextual (Lam, 2000). It is difficult to capture except, I would argue, visually and verbally between individuals. In the context of the mentoring relationship, the combination of tacit and explicit knowledge is core to the successful transfer of knowledge and learning between mentor and mentee. Individuals can sometimes be unaware that they have tacit knowledge; even if they are aware of it, they can be unable to convey the knowledge in words or visuals (Bennet and Bennet, 2008). We all know things or know what to do, yet we may be unable to articulate why we know them, why they are true or exactly what they are. To convey is to cause something to be known or understood or, in this usage, to transfer information from which the receiver is able to create knowledge.

“Much of the knowledge that the peer mentors and relational mentor possess is tacit and is learned from personal experience and from interacting with other employees” (Bryant, 2005, p.322). A mentoring relationship is, therefore, an opportunity to make productive use of this knowledge and expertise (Dalton et al., 1977) and to learn new ways of doing things (McKeen and Burke, 1989).

Nonaka and Takeuchi (1995) argue that new knowledge is created through the interaction of explicit and tacit knowledge. The interaction of tacit and explicit can lead, over time, to a better performance by the organisation, as is the hope within the case study institution. The transfer of tacit knowledge requires “close interaction and the

build-up of shared understanding and trust" (Lam, 2000, p.490). Establishing whether or not this was the case within the case study institution is a key focus of my research.

2.6.2.4 Knowledge sharing and creation

Knowledge without context is just information. Information given within a specific context, such as within the mentoring relationship, is relevant when interpreted by individuals and becomes belief.

Knowledge transfer can be realised at an "individual, an intra-organisational and an inter-organisation level" (Wilkesmann et al., 2009, p.465). Because sharing knowledge is a highly personal process and "cannot be controlled" (Swart et al., 2014, p.3), the emphasis should be on "facilitating knowledge sharing via contextual factors such as organisational culture and by adopting human resources practices" (Swart et al., 2014, p.3), such as mentoring.

The most common mechanism for transferring tacit knowledge is person to person through the spoken word. Tacit knowledge inherently resides within the minds of workers (Polanyi, 1966; Argote and Ingram, 2000) and needs to be transferred to individuals within firms through mentoring or other such interventions. This process can be difficult and time intensive because of the challenges associated with articulating tacit knowledge (Coff et al., 2006).

Lam (2000) argues that the interaction between tacit and explicit knowledge is vital for the creation of new knowledge. "Knowledge sharing can be defined as individuals sharing organisationally relevant experiences and information with one another" (Lin, 2007, p.457). High levels of organisational commitment makes employees significantly more willing to share tacit knowledge (Hislop, 2003; Lin, 2007). Lin (2007, p.421) found that "low levels of tacit knowledge sharing" are likely to be attributed to a "lack of organisational commitment and trust in co-workers".

The willingness to share what we know is very much intertwined with our own personal attitude and organisational commitment (Swart et al., 2014). Self-efficacy theory provides a unique theoretical model that illustrates why individuals may be motivated to share complex, tacit knowledge (Lee Endres et al., 2007). Self-efficacy is one of the most validated and researched theories of motivation across subject and task types (Bandura, 1997) and is an ideal theory to help us to understand why people choose to share knowledge in some contexts and not in others. In my research, during the one-to-one interviews, I asked mentors what motivated them to become mentors and give freely of their time to support others and share their knowledge with them through formal mentoring, i.e., mobilising tacit knowledge to achieve individual and organisational objectives (Polanyi, 1997). I present the findings in Chapter 4.

When people (i.e., mentees) acquire tacit knowledge from others (i.e., mentors), Nonaka et al. (2000) refer to this process as socialisation, the "dynamic interaction

between organisational members, and between organisation members and the environment" (p.30). Figure 2.6 illustrates this through the SECI model (Nonaka and Takeuchi, 1995).

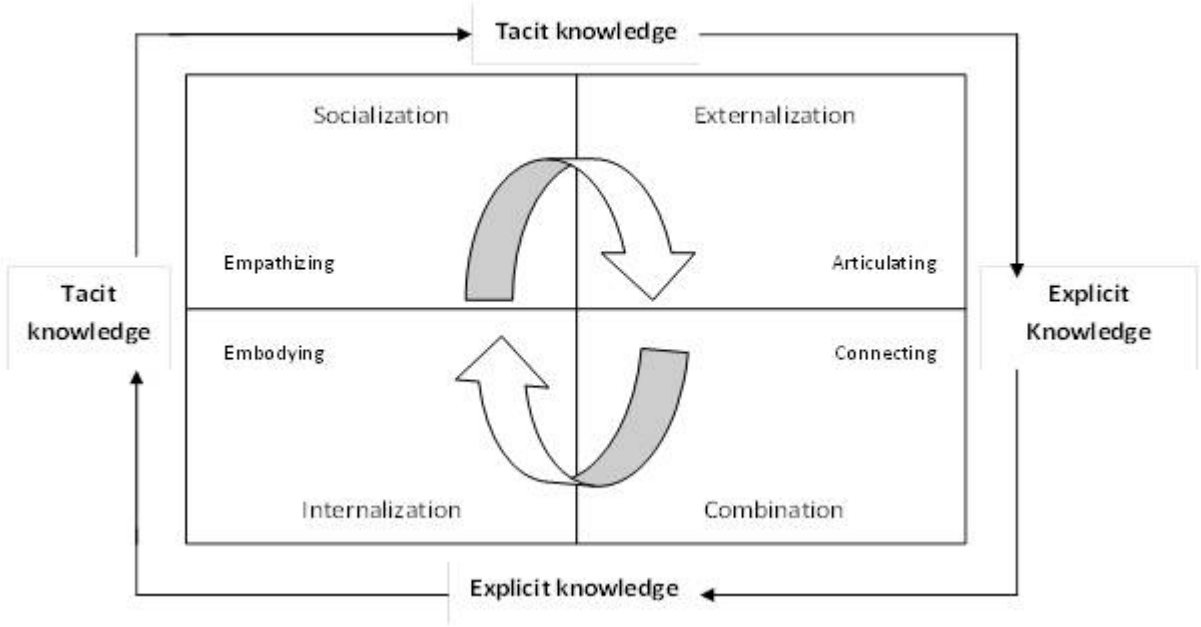

Figure 2.6 The SECI model

The SECI process looks at converting the learning to new tacit knowledge (socialisation), e.g., apprentices watching and observing. The model shows the conversion of tacit knowledge to explicit knowledge through articulation (externalisation); the conversion of explicit knowledge (of the mentor) into new, more complex explicit knowledge (combination) (for the mentee); and, in turn, the embodiment of the new explicit knowledge into tacit knowledge to be shared onwards throughout the organisation (internalisation), thereby providing an environment for the knowledge spiral to flourish. The socialisation dimension – that face-to-face dimension between co-workers – is more likely to be internalised by the receiver (Lee Endres et al., 2007).

Knowledge within the HE sector is obviously our most valuable asset. Knowledge workers can be identified as employees who apply their valuable knowledge and skills (developed through experience) to complex and abstract problems in environments that provide rich collective knowledge and relational resources (Crotty, 1998). The question of how we enable knowledge workers to share knowledge across boundaries is often posed (Crotty, 1998). Knowledge, as we know, particularly in academia, is power.

Encouraging senior academics to share within a mentoring relationship some of this knowledge/power, not discipline-specific knowledge but rather that valuable tacit knowledge, can be challenging. Studies undertaken by Alasuutari et al. (2008) suggest that commitment to the organisation positively influences the sharing of such

knowledge or, as they refer to it, knowledge donation. A positive communication climate also has an influence. “The more knowledge that a person collects, the more likely they are to donate to others” (Van den Hooff and De Ridder, 2004, p.117). As Patton (2002) argues, effective commitment is positively related to individuals’ willingness to donate and receive knowledge if they feel this knowledge will be valued, appreciated and used.

As set out earlier, Mowday et al. (1979) describe the knowledge-creating process as the dynamic interaction between organisational members themselves and between organisation members and the environment. The dynamic process of creating and sharing knowledge within a mentoring relationship is key to effective mentoring.

Organisations do not just process information but they create new knowledge through action and interaction in forums such as formal mentoring relationships (Mowday et al., 1979). The knowledge assets of the HE sector are just that – knowledge itself – and can be shared openly within the *‘ba’*. The knowledge assets in this context are the tacit and explicit knowledge that can help individuals to succeed and advance in their careers. Leadership has a role to play here – leaders can advocate mentoring and ensure that mentoring is openly encouraged from the top down. Openly discussing the role a mentor may have played in a very senior colleague’s career is one such way of encouraging uptake.

The sharing of knowledge within the mentoring relationship is one such committed area. Mentors, as key knowledge collectors, should be more willing to share. People are more willing to share their knowledge if they are convinced that doing so is useful and appreciated and that their knowledge will actually be used (Hall, 2001). Many authors (Scarbrough, 1999; Hislop, 2003; Smith and McKeen, 2003) have investigated the relationship between commitment to the organisation and sharing of knowledge and have come to the conclusion that an individual who is more committed to the organisation and has more trust in both management and co-workers is more likely to share their knowledge (Hinds and Pfeffer, 2003).

As knowledge is shared, it is developed and changed through a process of interpretation by both the provider and the receiver and is added to existing knowledge ((Watzlawick 1976), Swart et al. 2014, p.271). The process of integrating this new knowledge into already existing knowledge provides one with a ‘new state of knowing’ referred to by cognitive scientists as representational re-description (Karmiloff-Smith 1992; Kang et al. 2012).

According to Nonaka and Konno (1998), knowledge creation is a “spiralling process of interactions between explicit and tacit knowledge” (Nonaka and Konno, 1998, p.42) and “physical face-to-face experiences are key to the conversion and transfer of tacit knowledge” (p.46). Mentors share knowledge of processes, knowledge of people (who

you need to know and for what) and knowledge of systems; Nonaka and Takeuchi (1995) says such personal contact is essential to creating new knowledge.

In a HE context, the 'ba' process is seen through the use of communities of practice and colloquiums. Within the mentoring process, however, the 'ba' takes place on an individual, face-to-face basis, i.e., originating 'ba' allowing a place for individuals to share experiences, feelings and emotions on a one-to-one, face-to-face basis. That is not to say that mentoring cannot take place virtually (systemising 'ba'); in fact, due to multi-site locations, many organisations undertake and encourage remote mentoring through mechanisms such as skype and email. However, the research within the HE sector shows that 99% of all mentoring relationships are face to face. Establishing what type of environment existed within the case study institution and what 'ba' (space) was provided to support the mentoring process is discussed in Chapter 4.

The sharing of knowledge between students and staff happens continually. The sharing of knowledge and the mutually beneficial learning that takes between employees in this context is, however, less well defined or documented. HEIs need to find the best possible opportunities to make the best use of their workers' tacit knowledge to create competitive niches in an ever-changing society (Fouché and Lunt, 2010). HEI's should, therefore, facilitate an environment where knowledge sharing is encouraged (Allen and Eby, 2007). In my opinion, one such strategy is mentoring, which certainly provides an opportunity to externalise knowledge by turning tacit knowledge into explicit knowledge (Nonaka and Takeuchi, 1995), thereby providing a powerful form of knowledge creation and delivering innovative new ideas to organisations (Bryant, 2005) where trust is established and mentoring, as a development tool, is valued by the organisation.

2.6.2.5 Mentoring and learning

The literature purports that mentoring in itself is a learning process that is congruent with a value-based organisational model (Mavrinac, 2005). It is a process that "sends a powerful signal to organizational members that the individual development of all interested and motivated employees is critical to the realization of organizational dreams and aspirations" (Mavrinac, 2005, p.401). To the mentee, mentoring purports to help them adjust more smoothly to a new role (Eby et al., 2007). It provides the mentee with access to someone more senior other than their line manager and gives them a greater understanding of the formal and informal workings of the organisation. "Mentors help mentees master professional skills and ultimately 'learn the ropes' of both the discipline and the institution" (Johnson, 2015, p.8).

In addition to the career psychosocial and professional benefits of mentoring noted in the literature, mentoring can be a powerful knowledge-creation learning process that provides a one-to-one, learner-centred relationship, a safe place for the mentee to "express concerns, fears and aspirations to a non-supervisory organisation member" (Lawrie, 1987, p.3). A good mentor helps the mentee to recognise their strengths and

weaknesses and encourages them to take risks and be open to learning. Furthermore, the research establishes a positive relationship between mentoring received and mentee self-perception. Career self-efficacy and a positive self-perception with people "believing they are capable of successfully managing their careers and succeeding in the future" (Johnson, 2015, p.43)

Peer mentoring is becoming increasingly common and may be an effective way to facilitate knowledge creation and sharing (Bryant, 2005). It certainly is a very inexpensive way for organisations to tap into that wealth of knowledge, tacit and explicit, that more experienced staff members have.

Most importantly, mentors encourage mentees to value learning by imparting wisdom about the organisation's specific norms and values and helping to advance the mentees' careers (Lankau and Scandura, 2002). In Chapter 4, I set out the type of learning and knowledge exchange experienced by mentors and mentees.

2.7 Mentoring outcomes

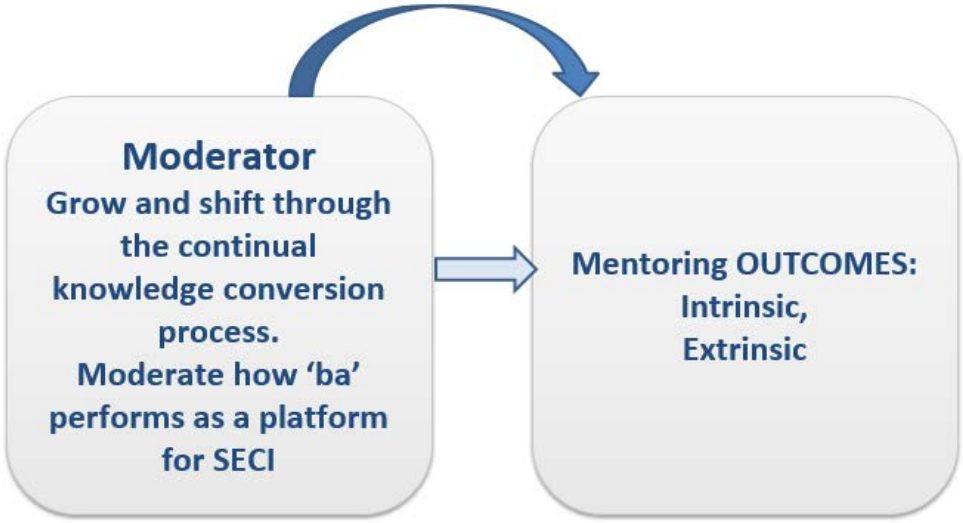

Figure 2.7 Mentoring outcomes

A review of the literature establishes that from a career development context, both the organisation and the individual benefit. The experience of fresh perspective, new insights, increased self-awareness and improved self-confidence are all outcomes attributed within the literature to mentoring (Woodd, 1997). The well-mentored employee enjoys a considerable "boost in social capital", which "includes such resources as influence, information, knowledge, support, advice, and goodwill" (Johnson, 2015, p.37) and provides mentees with the opportunity to gain insights into grant sources, job possibilities, early opportunities for leadership and engagement with professional organisation.

Kram, a well-known researcher in the field of mentoring, informed our understanding of mentoring in the workplace (1988). In her pioneering qualitative study of 18 mentor-

protégé dyads with Isabella (Kram and Isabella, 1985) – the first in-depth study of mentoring in the workplace – Kram delineated several key aspects of mentoring relationships, such as the functions of mentoring, phases of a mentoring relationship and complexities of cross-gender relationships. One of Kram's most-cited findings is her identification that mentors carry out what she terms 'career functions' and 'psycho-social functions' in the workplace. The career supports provided by the mentor assist the mentee to gain corporate exposure and develop career pathways, which, it is hoped, lead to advancement and 'know-how' within the organisation. Kram and Isabella (1985) argue that these psychological supports enhance the mentees' competence, confidence, self-worth and effectiveness.

However, the literature suggests that the mentoring relationship must be of a high quality for such outcomes to be experienced. As cited in Chapter 2, a high-quality mentoring relationship can be defined as a mutually beneficial relationship that meets members' needs while providing experiences of relational closeness. "High quality relationships are those relationships characterised by trust, disclosure, vulnerability and commitment" (Ragins, 2016, p.4); they offer exceptional opportunities for personal learning, growth and discovery for both mentor and mentee.

The literature set out various indicators of career success and suggests "that mentees enjoy higher levels of career mobility, accelerated job offers and greater recognition within their professions" (Johnson, 2015, p.51). Johnson also asserts that "Within academe mentoring is equally predictive of subsequent eminence and career achievement" (p.51). Compared to those who have not been involved in a mentoring relationship, mentees report greater career satisfaction, career advancement, career commitment, career expectations, job satisfaction, higher pay, organisational commitment and lower turnover intentions (Levinson et al., 1978; Kram and Isabella, 1985; Scandura, 1992; Allen et al., 2004; Dougherty and Dreher, 2007). Johnson (2015) points out that it is worth noting that career-oriented mentor functions (e.g., guidance, networking and challenge) and psychosocial relational mentor functions (e.g., encouragement, support, counsel and collegiality) contribute to mentee outcomes in positive ways.

According to the literature, the choice of mentor is particularly important and is crucial to the success of the mentoring relationship. The mentor must possess key characteristics and skills that assist in the development of a positive mentoring environment (Mathews, 2003). The mentor must have a positive attitude towards work, the capacity to encourage enthusiasm among employees, experience in the speciality area of interest to their mentees, strong leadership, communication and appropriate technical skills (Messmer, 1998, p.44).

The literature addresses benefits felt by those who are mentored compared to those who are not (Levinson et al., 1978; Kram, 1988; Johnson, 2015). In a review of 1,250 top executives in Wall Street, two-thirds of the respondents cited that having an early-

stage career mentor contributed to their career success, higher salaries, earlier promotions, a better adherence to a career plan and high levels of career satisfaction (Johnson, 2015). There is less evidence of this in academia. In a study of 430 faculty and administrators in a state university in Florida, Queralt (1982) found that academics with mentors showed significantly higher levels of career development than those without mentors in terms of publication record, grant record, leadership record, academic rank, yearly gross income from professional activities, job satisfaction and career development satisfaction than those without mentors.

Compared to non-mentored peers, mentees report greater organisational influence, more immediate access to important power-holders and greater allocation of resources, such as grants, fellowships and stipends. “Having a mentor is correlated with acquiring rank, promotion and eventual leadership roles within the university” (Johnson, 2015, p.50).

Bhopal and Brown's study (2016) of black and minority ethnic academics in UK HEIs (127 survey respondents and 15 interviews) found that over 50% of respondents had access to formal mentoring; while some respondents said they did benefit from mentoring, others felt it would not make any difference to their carer progression. Overall, however, the research did find that having access to a formal mentoring programme “was seen as a very important source of support which would benefit individuals to pursue their senior roles in HEIs” (Bhopal and Brown, 2016, p.29).

However, while the connection between salary and mentoring in business is evident, finding a clear link between mentorship and promotion within academia has been more difficult to establish. In a review of the mentoring scheme in Queen’s University Belfast (unpublished), between 2001 and 2014, over 200 academic women from contract researcher levels and above were mentored; 68% of the mentees, 84% of the mentors and 92% who had been both mentees and mentors progressed. Establishing whether or not there is any concrete evidence to support the connection between mentoring and promotion is something I strive to establish in my own research.

As we saw earlier, high-quality mentoring relationships can be defined as mutually beneficial relationships that meet members’ needs (Ragins, 2016). However, mentorships can vary considerably in their depth and quality (Kram and Isabella, 1985), and some mentoring relationships can be just average (Ragins, 2016). According to Ragins, average relationships deliver average outcomes – she does not support the notion that “mentoring delivers exceptional outcomes that develop employees, improve their performance and propel their careers” (Ragins, 2016, p.1). Extraordinary outcomes, she maintains, “require extraordinary relationships”. She argues that researchers have reported on the “most common mentoring experiences but have failed to capture the remarkable experiences and unique dynamics of high quality relationships” (p.1).

For some reason, the benefits of mentoring to mentors is discussed to a far lesser extent. Benefits are tangible (extrinsic) and intangible (intrinsic). Some of the benefits cited are personal satisfaction and fulfilment, a chance to re-evaluate one's own career path and the opportunity to provide networking opportunities and connection to younger, less experience faculty (Johnson, 2015).

There are many mantras around mentoring, such as 'everyone that makes it has a mentor' and 'good managers make good mentors'. My research addresses the expectation that mentoring relationships are expected to deliver exceptional outcomes for mentees.

To review mentoring outcomes, I utilised the structural model of the relationship between mentoring and outcomes by Kammeyer-Mueller and Judge (2008). The researchers found that having a mentor was related to job and career satisfaction, and they concluded that overall mentoring and career mentoring were strong predictors of career success. They reached the conclusion that in order to explain career success, further research was needed, i.e., rather than just looking at the mentor function scales, there may be a need to look more closely at the mentor process.

Kammeyer-Mueller and Judge's model enabled them to assess the distinct contribution of career and psychological mentoring when both are taken into account. However, their results showed only a moderate to weak effect of mentoring on career outcomes such as performance, job satisfaction and career satisfaction, which obviously counteracts some of the other findings within the literature.

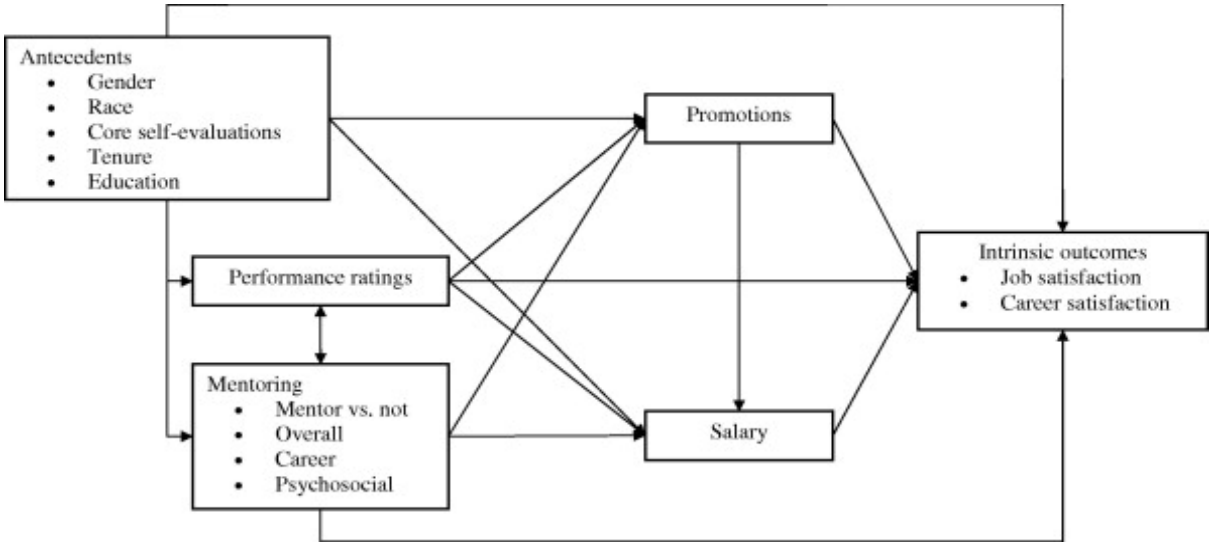

Figure 2.8 Structural model of the relationship between mentoring and outcomes

Figure 2.8 illustrates two distinctive paths for measuring the outcomes of mentoring. One path measures the mentee's success in relation to salary and promotions (extrinsic outcomes) while the other path measures success factors and intrinsic outcomes. Mentors provide mentees with psychological support and opportunities to

develop, which can contribute to the general satisfaction of mentees above and beyond the extrinsic rewards of salary or promotion (Russell and Adams, 1997).

I used Kammeyer-Mueller and Judge's framework to formalise some of the research questions that I put to mentors and mentees in relation to any outcomes they had experienced from their mentoring relationships. The purpose of these questions was to establish whether tangible (extrinsic) outcomes, such as promotions and salary increase, and intrinsic (intangible) outcomes, such as improved job and career satisfaction, were experienced by mentors and mentees in the case study institution.

2.8 Summary

The aim of this chapter was to provide a comprehensive overview of the literature on mentoring, particularly formal staff mentoring in higher education. As the focus of my research was to present a new, knowledge-based perspective of formal staff mentoring, the literature on knowledge formed an integral part of the literature review. Utilising Nonaka and Takeuchi's SECI model (1995), a key component of the knowledge-creating model (Nonaka et al., 2000) presented in Figure 2.1, provided me with a framework on which to focus my research. The literature I reviewed informed the sub-research questions, which I changed from time to time during the process to ensure that the overall research aim would be addressed in my one-to-one, semi-structured interviews.

While extensive research on mentoring argues that "mentoring and other developmental relationships play a significant role in individuals' professional and career development" (Rock and Garavan, 2011, p.122), the mentoring literature largely ignores the function of information and knowledge sharing, which can play a significant role in mentoring relationships (Bryant, 2005).

Influenced by Nonaka et al*'s* knowledge-creating process (2000) and Nonaka and Takeuchi's SECI model (1995), I identified three components of a knowledge-based perspective of mentoring: (i) context, (ii) process and (iii) outcomes. I then identified four research questions around those three components:

1. What are the contextual factors that influence the mentoring process from the perspectives of the mentor and mentee within a HE context?
2. What is the nature of the matching process?
3. How does knowledge sharing and transfer take place within the mentoring process?
4. What are the key outcomes of the mentoring process as experienced by both mentees and mentors?

Mentoring has evolved over time from traditional to relational. Providing a platform for mutual discovery and learning, formal staff mentoring schemes have grown more popular within the HE sector. Mentoring relationships are an effective way of building new organisation knowledge, building on intellectual capital, sharing tacit knowledge

and, ultimately, creating new knowledge – these key areas of my research are addressed in Chapter 4.

Establishing trust (Bozionelos and Wang, 2006) and being mindful of any potential cross-gender-related issues are factors to be considered in the context of mentoring. The ability to perceive what the mentee needs is a key attribute identified in the literature.

Darwin (2000) considered the limitations of mentoring to be more than relational. She framed mentoring as an outdated, autocratic mechanism for handing down knowledge: "Power and control of knowledge remain barriers to open communications in work settings" (p.207) while Allen and Eby (2007) criticised the literature for presenting almost predominantly positive aspects of mentoring rather than having both positive and negative aspects. I have to agree. Not all mentoring is positive, and not all mentors are committed. Some mentors are quite cynical and can pass on a cynical attitude to their mentees. Furthermore, although it is often mistakenly assumed that any mentoring must be better than no mentoring, Ragins et al. (2000), for example, found that bad mentoring can be destructive and, in some cases, worse than no mentoring at all. However, overall, following an extensive review of the literature, I found far more positive aspects to formal mentoring than negative.

We must bear in mind that although mentoring is a process that can be highly successful, it can also be less than perfect or, at times, disastrous (Rock and Garavan, 2011). Programmes in HE have been met with mixed success (Angelique et al., 2002) – very few studies have established a clear link between mentoring and tangible outcomes for the mentees. Utilising the structural model of the relationship between mentoring and outcomes (Kammeyer-Mueller and Judge, 2008), my research aims to look at the outcomes of mentoring from a knowledge-based perspective within the HE environment by establishing whether or not mentoring has any substantial intrinsic or extrinsic outcomes.

There are limitations to my research. Although I reviewed the literature on mentoring and gender, I have not addressed the broader area of mentoring and diversity, in particular mentoring and race, sexual orientation and disability, which are areas that need to be explored. I am also very mindful of the claim by Ragins (2016) that we do not know enough about high-quality mentoring. She argues that we know a lot about average mentoring because we study the most common experiences, the average experience – she says that if you think of mentoring as a continuous bell-shaped curve, the most common experiences fall in the middle of the curve. "By focusing on the average we neglect the extraordinary" (Ragins, 2016, p.489).

My hope is that my research will go some way to addressing the gap in the literature on the function of information and knowledge sharing in mentoring relationships and will present a new perspective of formal mentoring within HE.

Chapter 3 – Research design and methodology

3.1 Introduction

In this chapter, I will provide a detailed analysis of my chosen research methodology to set out the theoretical and philosophical underpinnings that influenced my choice. Firstly, I will set out the context of my study, the philosophical and ethical considerations, the steps taken in the empirical data gathering and the robust data analysis tools used to support the analysis of my findings. Finally, I will conclude the chapter by reflecting on my choice of methods and the process I undertook in reaching the decision and the lessons learned along the way.

As set out in Chapter 2, the focus of my research was to examine the reported experiences of those involved in formal mentoring relationships in HE by extrapolating the information gathered from the research participants (mentors and mentees) rather than merely presenting my own knowledge of the subject matter (Cope, 2011). In so doing, I hope to contribute to narrowing the identified research gap on formal staff mentoring within HE from a knowledge-based perspective and answer the sub-research questions as set out.

The aim of this chapter is therefore to provide a detailed description and analysis to support my choice of research methodology – a thematic analysis – and to set out "the procedural framework within which the research was conducted" (Remenyi, 1999, p.28). As Bryman (2004) pointedly states, too few studies elaborate on their method of data analysis. I undertook a very thorough review of all research methods available to me before deciding on which method best suited my research.

I found the research onion developed by Saunders et al. (2007) to be particularly useful in setting out my research strategy. When viewed from the outside, each layer of the onion describes a more detailed stage of the research process – an effective progression through which a research methodology can be designed. Its usefulness lies in its adaptability for almost any type of research methodology and can be used in a variety of contexts (Bryman, 2012).

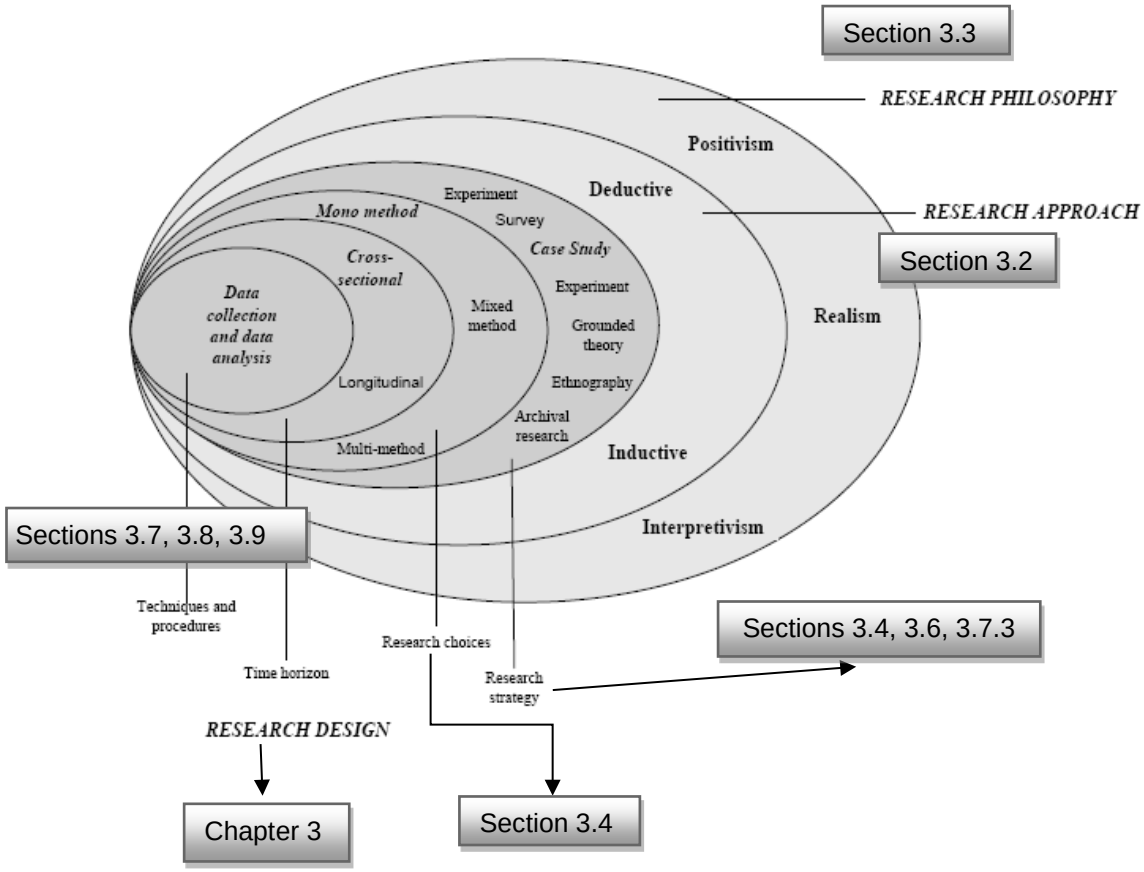

Figure 3.1 The research onion (Saunders et al., 2007)

By adapting the stages defined by Saunders et al. (2007) to suit my particular research tools, the research onion provided me with an operational framework (Leedy, 1989) to follow to ensure that I formulated an effective methodology, i.e., a qualitative mixed-methods approach which included a single case study (Section 3.2.1 and 3.7.2), a focus group (3.7.3) and 27 semi-structured interviews (3.7.4). Being mindful of my own direct involvement with the mentoring scheme, I adopted a triangulation approach to the investigation of my research question. I was able to triangulate the data, given the multiple methods I used, to mitigate any potential biases and based on the premise that "no single method ever adequately solves the problem of rival causal factors" (Denzin, 1978, p.28). Each method in itself, i.e., the case study, the focus group and the one-to-one semi-structured interviews, reveals different aspects of "empirical reality" (Denzin, 1978, p.28). I used a number of methods and sources, capturing data and difference of opinion, in order to present a comprehensive understanding of my research phenomenon (Patton, 1999), that of formal mentoring from a knowledge-based perspective. This included the undertaking of a focus group (Section 3.7.3) with 12 staff (7F-5M), ensuring my own biases did not influence the data in any way and testing the questions to be used in the one-to-one interviews. This provided an open forum for discussion, adding another aspect to my research and assuring the validity and reliability of my research findings.

3.2 Research context and rationale

As set out in Chapter 2, there is a gap in the research on formal staff mentoring in HE from a knowledge-based perspective (Scandura and Williams, 2001; Zellers et al., 2008; Abdullah et al., 2014). The aim of my research was to contribute to narrowing this gap. This section firstly addresses the context for my research and my specific interest in the topic of formal staff mentoring within HE which comes from my direct involvement in the design, implementation and management of a formal staff mentoring scheme within my own institution, the case study institution. Having come to the HE sector from the semi-state sector, I was intrigued by how academic staff engaged with formal mentoring and I wanted to investigate this further. What was the value of the mentoring process to both the mentor and mentee and to the institution? What knowledge/information was exchanged and how did it benefit those involved. The context as to how organisations actually create and manage knowledge and how mentoring can contribute to this process was key to my research. Figure 2.2 sets out the key themes identified in the literature, which informed my research strategy.

Mindful of the challenges and criticisms sometimes levelled at a single case study approach as a research method, I chose my institution for a number of reasons. Firstly, a formal staff mentoring scheme had been in place for close to 10 years within the institution. This provided a rich source of data (83 matched mentor and mentee pairs) which could inform our understanding of formal mentoring from a knowledge-based perspective, my central research aim. Secondly, having been involved in setting up the scheme from the outset and having held the role of mentoring scheme manager, I had background knowledge about the scheme, the context and the process and an established relationship with the mentors and mentees, which provided me with access. Due to my close involvement with the scheme previously, I was extremely mindful of any potential personal biases that might in any way influence or affect the research and therefore I took a number of steps to ensure that these were mitigated by using multiple methods or data sources (triangulation) as set out. While choosing a single case study as a primary source of data collection supporting my arguments through in-depth analysis (Yin, 2013), my qualitative research methodology was further supported by a focus group and 27 one-to-one semi-structured interviews as set out in Section 3.7. The following sections set the context, the background to the introduction of formal mentoring within the case study institution.

3.2.1 The case study institution

The institution was established in 1972 as a ‘National Institute for Higher Education’ in the Mid-West of Ireland and classified as a university in 1989. It is an independent, internationally focused university with over 15,000 students and 1,528 staff. It is a young, energetic and enterprising university with a proud record of innovation in education and excellence in research and scholarship. Its mission is to be a distinctive, pioneering and connected university that shapes the future through educating and

empowering people to meet the challenges of tomorrow (*Broadening Horizons 2015-2019)*. Particular attention is paid to the generation of knowledge that is relevant to the needs of Ireland's continuing socio-economic development. The institution offers a range of programmes up to doctoral and postdoctoral levels in the disciplines of arts, humanities and social sciences; business; education and health sciences; and science and engineering.

Table 3.1 Staff Profile

Category	Number	Female	Male
Academic	685	324	361
Research Staff	279	123	156
Professional/Support	605	405	200
Totals	**1569**	**852**	**717**

The university is recognised as possessing one of the most spectacular and environmentally sympathetic third-level campuses in the world, with unrivalled sports and cultural facilities,The institution's current strategic plan – *Broadening Horizons 2015-2019* – clearly sets out the university's commitment to empowering staff to excel and achieve their potential in a collegial and supportive environment.

The strategic plan states, "We will seek to exemplify gender equality best practice in all aspects of our activities" and "reinforce our position as the leading university in Ireland in terms of female representation in senior academic roles." Between 2007 and 2017, the institution saw the number of women at full professorial levels increase from 8% to 30% (Table 3.2) ahead of the national average of 19% (22% UK average). Currently, 34% of women are at Associate Professor level compared to the national average of 26%. Of the 605 professional/administrative support staff in the institution, 405 are women, i.e., 67%. Of the 405 female staff, 125 (30%) earn salaries above €70k, with 49 of the 200 male staff (24%) earning above that figure.

In the past 10 years, the institution has placed gender balance to the fore through a number of funded initiatives, and it was the first of two universities in Ireland to be awarded the prestigious Athena SWAN award in 2015, the year this award was extended to Ireland. The strategic plan, *Broadening Horizons 2015-2019*, commits the institution to seeking Athena Swan accreditation in STEMM (science, technology, engineering, mathematics and medicine) disciplines and strongly supports the proposed extension of Athena Swan to non-STEMM disciplines" (p.34).

3.2.2 Background to the formal mentoring scheme

The lack of representation of women at the most senior levels in HE is not unique to Ireland or to my institution. With women remaining significantly under-represented in senior academic positions, this is an ongoing problem. The HEA statistics (2017) cited in Chapter 2 show that more than half the staff in the HE sector in Ireland are women, but women hold less than one-quarter (21%) of full professorships. While women represent 62% of non-academic staff, men represent 72% of the highest-paid non-academic staff; women represent only 28% of university staff and 17% of institute of technology staff at the highest-paid non-academic levels (over €100k). As set out above, the case study institution is slightly ahead of these national averages. While there are currently two female presidents in Ireland's 14 institutes of technology (which represents regression because there were five previously), there has never been a female president of a university in the Republic of Ireland.

In 2006, the extremely low representation of women at senior levels in the case study institution warranted action (Table 3.2). Atlantic Philanthropies funding was secured to support the setting up an Equal Opportunities Office in the institution for a three-year period. The overall objective of the office was to address the serious under-representation of women at the most senior levels at that time among both academic and professional/support female staff. Key initiatives, such as the setting up of a senior-led Equal Opportunities Committee, focused on career development programmes for women and the setting up of a Women's Forum with a number of subcommittees to give women a voice was initiated. One of these was the Mentoring Committee.

Table 3.2 Female representation across academic grades in 2007

	Male	**Female**
Professor	92%	8%
Associate Professor	94%	6%
Senior Lecturer	83%	17%
Lecturer	58%	42%

I joined the institution in 2006 as Learning and Development Manager and immediately became involved in the Mentoring Committee. The pilot mentoring scheme was developed in 2007 and administered by this committee. The pilot scheme targeted only female staff across the university, despite some resistance from male colleagues. The role of the Mentoring Committee was to encourage mentoring as an initiative for all female employees in the case study institution: academic, professional and support staff. Its aim was to provide a platform where experiences could be shared on a one-to-one informal basis, thus providing support to women at various stages in their careers.

When the Atlantic Philanthropies funding ended in 2008, the role of the Equal Opportunities Office was subsumed into that of Learning and Development and become the Learning and Development and Equal Opportunities Office for which I was assigned responsibility. I also took on the role of chairperson of the Mentoring Committee from 2008. I no longer hold this position.

3.2.3 The development of the mentoring scheme

Mentoring schemes in existence in other universities in Ireland, Scotland and the USA were examined by the Mentoring Committee. In particular, support was very forthcoming from Queen's University Belfast which had an all-female mentoring scheme at the time under the directorship of Professor Madeleine Ennis. The research established that the key to allowing a progressive and supportive mentoring environment to develop was the mentee-mentor connection. The scheme was developed as follows:

- The importance of building trusting relationships and encouraging mentors to give voluntarily of their time was recognised as being fundamental to the success of the scheme.
- Group mentoring schemes were considered as well as a scheme based on a register of mentors and mentees, with mentees being free to choose someone appearing on the register.
- In the environment at the time, it was felt that for the scheme to be effective it needed to be carefully managed and monitored to ensure confidentiality at all times. Unless decided differently, only the mentor, the mentee and the scheme manager would ever know who was in any mentoring relationship.
- A process was put in place with a view to supporting the strategic objectives of the institution and taking account of existing structures and the need for confidentiality during the process.
- Principles, definitions, internal guidelines and an application process were agreed.
- The scheme was publicly launched and applications invited from employees. Tailored training was provided to the applicants to optimise the benefits for all involved.
- This process resulted in 26 applicants (from a wide range of departments) being anonymously matched into 13 mentoring pairs, all females.

3.2.4 A review of the pilot

A facilitated meeting was held on 24th January 2008 to obtain feedback from the mentors and mentees involved in the pilot scheme; 60% (14) mentors and mentees took part in the feedback session, and 80% of the attendees completed feedback forms afterwards. Feedback was sought from the mentors and mentees with questions addressing a number of critical areas:

- How satisfied were the participants with their mentoring partnerships?
- What were their views of the process itself and how it was rolled out to their group?
- Was the training adequate to support them in establishing successful mentoring relationships?
- Was the support received from the Mentoring Committee adequate?
- What recommendations would they make to improve the process?
- Would they recommend the rollout of mentoring for personal and professional development across the campus?

3.2.5 Summary of focus group feedback (2008)

- Generally, participants were either satisfied or very satisfied with their current mentoring relationships. While a number of the continuing mentoring relationships had some areas for improvement, no major issues were reported.
- Two of the mentoring relationships had ceased voluntarily.
- The consensus within both groups was that the period between the training and being paired with a partner must be kept as short as possible to ensure the process does not lose momentum.
- The timing of the launch was seen as crucial, with the academic calendar being taken into consideration. Preference was expressed for either a January or September launch each year.
- The participants stressed the importance of more visible support from the committee. There was a general agreement that the committee could be more active once the partnerships were established. More email contact and also some get-togethers to enable mentors and mentees (separately) to share experiences and concerns about the process were recommended. Those involved found the feedback session valuable, but felt it should be planned to help the mentors and mentees refocus on their relationship.

3.2.6. Mentoring and gender

As the pilot mentoring scheme was initially offered to women only, the issue of gender and mentoring was put to the focus group attendees.

Initially, when the mentoring scheme was being designed and developed in the university, indications were that women mentees would only want women mentors as it was felt that only women would fully understand the challenges faced by other women in combining careers with the demands of family while still achieving career goals. However, as the scheme developed, this became less of an issue with female mentees just wanting access to the 'best mentor possible regardless of gender' as emerged during the 2016 focus groups and one-to-one interviews (sections 4.3.4 and 4.4.1.2).

The feedback also indicated that the one-to-one conversation with the mentoring co-ordinator following the mentee training programme was crucial to the effectiveness of the matching process. It provided mentees with the opportunity to be more specific about their requirements and to discuss face to face whether they had a specific requirement in relation to the gender of their mentor. Generally, people were either satisfied or very satisfied with their mentoring relationships. The feedback on the 'matching process' also was very positive with those involved feeling that it was important that they could confidentially refuse a suggested mentor with the mentoring scheme co-coordinator without causing offence.

3.2.7 Formal training

Although many academic staff had some previous experience of informal mentoring – in particular, mentoring of students or being assigned to a new member of staff within their department – few had been involved in formal staff workplace peer-to-peer/relational mentoring. For this reason, it was decided that mentoring training for mentors and mentees would be essential for participation in the scheme. Having reviewed other mentoring schemes, it was agreed that the training workshops should be both informative and skills-based. The workshops were designed to give mentors and mentees the opportunity to clarify their expectations as well as their own role in the mentoring relationships See Appendix 1 – Mentoring scheme - outline of training.

Understanding the boundaries of the mentoring relationship was deemed particularly important. What is mentoring and what is it not? Mentors trained as part of a formal mentoring initiative are exposed to basic mentoring concepts and principles and learn about the benefits to all parties, as well as, ideally, receiving training in mentoring practice. There is a substantial body of knowledge to support mentors once they have begun to probe the nature of mentoring partnerships and had some experience of the processes involved. Training workshops have provided a space for discussion about various topics, which have stimulated a good deal of debate in the recent academic literature on mentoring:

- Facilitating goal setting and follow-through
- Managing the 'fit' in the partnership
- Managing the phases of the mentoring partnership
- Mentor self-management
- Intentional modelling

3.2.8 The outcome of the pilot (2007)

The aim of the mentoring scheme was to provide support, challenge and guidance. The networking opportunity was deemed by the participants to be invaluable and the scheme fostered greater inclusivity across the university. The comments received from the focus group were extremely interesting, as the Mentoring Committee had made a concerted effort to take a back seat in the formal programme and not to interfere in any way in the process for fear of breaking some element of confidentiality. It was obvious from the feedback received that this was an incorrect strategy and that more involvement in the process was required, through support workshops, networking events and more formalised structures around the system. Taking on board the feedback from the pilot mentoring scheme and presenting the findings to the Executive Committee, it was agreed that the scheme should be formally launched and made available to all staff and both genders.

3.2.9 Launch of formal mentoring scheme at the case study institution

The formal scheme was officially launched in October 2008. The aim of the mentoring initiative was reconstituted to reflect the inclusion of both genders. The revised aim of the formal mentoring scheme was set out "*to provide a platform through which experiences can be shared on a one-to-one informal basis thus providing support to all staff, across all roles and across all career stages".*

Providing a formal mentoring scheme for all staff (male and female) was a first for the HE sector in Ireland. The scheme grew in strength and impact between the years 2008 and 2013. From 2013 to 2016 the scheme only operated on a request basis, with very limited numbers availing of the scheme. While initially the uptake was almost evenly spread between academic and support staff, a review of the uptake shows that the uptake in recent years has been predominantly from academic and research staff.

Between 2007 and 2017, the institution saw the number of women at full professorial levels increase from 8% to 30% (Table 3.3) ahead of the national average of 19% (22% UK average). Currently, 34% of women are at Associate Professor level compared to the national average of 26%.

Table 3.3 Female representation across academic grades in 2007 and 2017

	Male 2007	Female 2007	Male 2017	Female 2017
Professor	92%	8%	70%	30%
Associate Professor	94%	6%	66%	34%
Senior Lecturer	83%	17%	68%	32%
Lecturer	58%	42%	50%	50%

While the statistics are still worryingly low, establishing whether formal staff mentoring in any way contributed to the increase in women at senior levels was a question I posed in my research.

Since the inception of the scheme in 2008, 83 pairs were successfully matched and 64 (44F, 20M) mentors were trained. Not all trained mentors were successfully matched, and some trained mentors were called upon in every round. The matching of mentors and mentees is very much dependent on the requests. Having availed of the scheme as mentees and following completion of their mentorship, some members of staff have undertaken mentor training and in certain circumstances have now also acted as mentors.

Table 3.4 Mentors by faculty and gender

Breakdown by faculty	Number of mentors	Male	Female
Mentors EHS	15	8	7
Mentors S&E	14	11	3
Mentors KBS	10	1	9
Mentors AHSS	8	0	8
Total mentors faculty	47	20	27

Table 3.5 Support staff mentors by gender

Support staff	Number of mentors	Male	Female
Mentors	17	0	17
Total trained mentors	64	20	44

Table 3.6 Mentees by faculty and gender

Breakdown by faculty	Number of mentees	Male	Female
Mentees EHS	28	5	23
Mentees S&E	21	7	14
Mentee KBS	5	0	5
Mentees AHSS	7	1	6
Total number of mentees	61	13	48

Table 3.7 Support staff mentees by gender

Support staff	Number of mentees	Male	Female
Mentees	22	3	19

Tables 3.4 to 3.7 clearly set out the number of trained mentors by gender and the numbers of staff mentees who have availed of the scheme to date. As can been seen, 20 male and 27 female academic staff volunteered to act as mentors, which meant that 43% of all trained academic mentors were male. However, of the 20 trained male academic mentors, none is from the Faculty of Arts, Humanities and Social Sciences, which is surprising, and only one volunteer was from the Kemmy Business School. There are no trained male mentors from the support units, which is concerning. As evidenced from the data presented in tables 3.5 and 3.6, the uptake of mentoring by women (81%: 67F) far exceeds that by men (19%: 16M). Therefore, the single case study institution provided a rich source of data for my primary research.

As I was taking a knowledge-based view of mentoring, in particular the 'ba', the socialisation aspect of mentoring through the one-to-one interaction, my unit of analysis was the individual mentor and mentee. In order to ascertain their individual perception of mentoring from a knowledge-based perspective, I conducted 27 one-to-one, semi-structured interviews with 13 mentors (8F, 5M), 12 mentees (8F, 4M) and two females who acted as both mentees and mentors.

Table 3.8 Interview participants

Interviewees by participant type and gender	Mentor	Mentee	Acted as both mentee & mentor	Total
Male	5	4	0	9
Female	8	8	2	18
Total	**13**	**12**	**2**	**27**

3.2.10 Reflection on my role as the mentoring scheme manager and researcher

Following the review of the application process, the training programme content and the one-to-one sessions held to ascertain mentoring requirements were all adapted. The scheme was fully integrated into key HR practices within the institution with responsibility for the matching process being assigned to me in my role as Learning and Development and Equal Opportunities Manager, as opposed to a subgroup of the Mentoring Committee who had initial responsibility for this process. In that role, I was responsible for matching over 70 pairs of mentors and mentees. The Mentoring Committee continued for a couple of years in its work to promote the scheme and to identify speakers for activities such as support lunchtime events. It ceased to operate in 2011. Initially, an external facilitator delivered the training, but in later years I became responsible for delivering the training workshops.

My closeness to the scheme was a positive for me in many respects as my established trustworthy relationships with both the mentors and the mentees provided me with access that another researcher might have struggled with. Outside of the matched pairs, I was the only person who knew who had been involved directly in the scheme. This knowledge was very important to establishing the trust necessary to undertake frank and open discussions in the one-to-one interviews. This was particularly important where mentees might have been critical of very senior members of staff who had acted as mentors. However, I was extremely conscious of the need to take steps to ensure that my previous involvement with the scheme did not risk creating any potential biases in my subsequent role as researcher.

As I was no longer managing the scheme at the time of undertaking the research, the primary motive of my research, which was clearly set out at the commencement of each interview, was to learn from the experience of those who had been directly involved in the scheme, with a view to growing and developing the scheme in the future. Steps were taken to mitigate potential biases through a number of channels as set out in sections 3.1, 3.7 and 3.8. The undertaking of semi-structured interviews as opposed to structured interviews to allow the respondents to expand or take the conversation in different directions was one such measure. Establishing rapport and building trust with respondents was crucial so that interviewees could feel comfortable being open and honest with me about their experiences (Wiles et al., 2008). My perception of the interviewees was that they felt comfortable sharing information with me; I am confident that the transcripts support this.

Piloting the questions within a focus group and the use of a data analysis software tool, NVivo, to ensure a thorough analysis of the rich data gathered through coding, mapping of conceptual categories and the production of an audit trail, were measures undertaken to ensure the robustness of the study.

3.3 Research philosophy and philosophical considerations

A number of authors point to the philosophical requirements in relation to research design. According to Easterby-Smith (1991), research design is more than the methods by which data are collected and analysed; it is the overall configuration of a piece of research, what kind of evidence is gathered from where, and how such evidence is interpreted in order to provide good answers to the basic research question.

Easterby-Smith et al. (2012) further suggest that knowledge of philosophy can help the researcher to recognise which design will work and which will not. The appropriateness of a research approach, as observed by Morgan and Smircich (1980, p.491), "derives from the nature of the social phenomena to be explored". As my research examined the meanings that humans (mentors and mentees) attach to the experience of formal mentoring in HE, an in-depth qualitative method was deemed to be the most appropriate. Qualitative methods have their philosophical origins in phenomenology, and the inductive approach taken was deemed to be the most suitable as my own research beliefs are in line with those of Bogdan and Taylor (1990) and Saunders et al. (2011), i.e., that the methods by which we study people affect how we view them. If we reduce people to statistical aggregates, we can lose sight of the subjective nature of human behaviour.

The phenomenologist seeks understanding through such qualitative methods as participant observation, open-ended interviewing and personal documents. These methods yield descriptive data that enable the phenomenologist to "see the world as subjects see it" (Bogdan and Taylor, 1975, p.2). An effective means by which to do this is through interviews, or texts, where the response to a question can be open (Feilzer, 2010) or, in the case of my research, through semi-structured interviews, which enabled me to develop the questions throughout the process to ensure that the respondent further expanded upon the information provided.

Burrell and Morgan (2009) further note that all organisation theorists approach their work within a frame of reference, which comprises of a series of assumptions, whether explicitly stated or not. These assumptions come from theory (Miles and Huberman, 1994). In the case of my research, they came from my review of the literature and my direct experience with formal mentoring and influenced the general objectives of my study. When considering which research design best suited my research, I was mindful of the teachings as set out and so I looked at the questions suggested by Crotty (1998) and Hefferon and Gil-Rodriguez (2011).

Table 3.9 Research strategy

Questions?	Where addressed in my thesis
What epistemology – theory of knowledge embedded in theoretical perspective – informs my research?	Chapter 2 – Literature review Theoretical Model – Figure 2.1
What is the phenomenon I am studying?	Formal staff mentoring in HE from a knowledge-based perspective The mentoring context, 2.5 The mentoring process, 2.6 Mentoring outcomes, 2.7
What is my personal experience and emotional relationship with the phenomenon, i.e., with mentoring?	Research context and rationale, 3.2
What theoretical perspective – philosophical stance – lies behind the methodology in my questions?	Research philosophy and philosophical considerations, 3.3 Ethical considerations, 3.5 The role of the literature in informing my research, 3.7.5
What methodology governs my choice and use of the chosen method (e.g., experimental research, survey research, ethnography etc.?)	Research philosophy and philosophical considerations, 3.3 Research strategy, 3.4 Research methods, 3.7
What methods – techniques and procedures do I propose to use and why e.g. interviews, focus groups, questionnaires?	Research methods, 3.7
Who are the participants experiencing the phenomenon?	The mentors and mentees – Research methods, 3.7
How do the participants make meaning of their experience?	Research findings, chapters 4 and 5

The following sections of this chapter will clearly set out how I came to the decision I did in relation to my choice of research methodology.

3.4 Research strategy

While acknowledging that both quantitative and qualitative data collection methods have value, the decision to choose one over the other was based on which methodology would address my specific research question and thereby enhance our understanding of mentoring from a knowledge-based perspective and answer my four sub-research questions:

1. What are the contextual factors that influence the mentoring process from the perspectives of the mentor and mentee within a HE context?
2. What is the nature of the matching process?
3. How does knowledge sharing and transfer take place within the mentoring process?

4. What are the key outcomes of the mentoring process as experienced by both mentees and mentors?

Consideration was given to such quantitative tools as an online questionnaire but I felt this would not yield the rich descriptive data that face-to-face meetings with mentors and mentees would provide. While an online questionnaire would have possibly yielded a larger volume of responses, it would not have provided me with the opportunity to take an inductive qualitative approach to analysis.

I also considered a mixed-methods approach using a survey questionnaire and interviews. I felt there was some merit in considering this approach but, as such rich data was available and accessible to me within the case study institution, I felt strongly that in-depth one-to-one semi-structured interviews of both mentors and mentees would be more effective in providing me with the opportunity to explore particular responses further.

As set out in Section 3.7.2, being mindful of the criticism sometimes levelled on the use of single-case studies, I also considered using multiple case studies for the understanding of the phenomenon (Yin, 2003). Researchers use multiple cases to understand the similarities and differences between the cases, thus informing theory. However, as the context of my research was the HE sector and as the case study institution was the only institution in Ireland at the time to have a formal mentoring programme for all staff, there was no direct comparator available, making the analysis of the data both within each situation and across situations (Yin, 2003) difficult. I also considered comparing a mentoring programme in a corporate environment, but I felt that this would add little to the specific focus of my research, the HE sector, and, as previously noted, there is significant research available in the commercial context.

From an epistemological point of view, I determined that a positivist approach would not be appropriate to my particular study as my aim was to ascertain the phenomenological, ‘lived-in experience’ of those involved in mentoring, both from the perspective of the mentors and the mentees.

My choice was also influenced by the qualitative review of methods and content focus by Allen et al. (2008), which found that studies of mentoring generally employed quantitative methods involving a single method of data collection from a single source (typically the mentee). As the aim of my research was to present a new lens on mentoring, i.e., looking at it from a knowledge-based perspective, I was influenced to take a different qualitative approach to my research.

In the current study, the answers provided to the research questions are those given in the case study institution by the 27 interviewees (mentors and mentees) and focus group participants.

Furthermore, the qualitative method has a number of strengths in that the research usually takes place in a natural setting (Creswell, 2013) where the researcher is an instrument. For my research, the natural setting was the case study institution. As the person responsible for managing the mentoring scheme for many years, I was in the privileged position of having access to mentors and mentees from whom to gather data, which I could then analyse to make sense of the findings (Creswell, 2013).

While there are many criticisms of qualitative research, not least that methods of analysis are not well formulated (Miles, 1979), this has certainly changed in recent years with the introduction of data analysis tools such as NVivo, which I will discuss later in this chapter (section 3.7).

Qualitative research is usually used for examining the meaning of social phenomena rather than seeking a causative relationship between established variables (Feilzer, 2010). Qualitative research asks questions about the 'nature of phenomena' with the purpose of describing and understanding it from the participants' point of view (Creswell, 2013). This applied to my research – I was concerned with descriptive data, people's own words and observable behaviour, which led me to take an inductive position. Since we cannot know, we need to observe the phenomenon in order to gain the knowledge.

Within my research, I sought to examine mentors' and mentees' perceptions of the mentoring relationship from a knowledge-based perspective, particularly around the transfer of tacit knowledge between mentors and mentees. The fact that there is a well-established history and tradition of qualitative approaches within management research (Cassell et al., 2006) influenced my choice. Qualitative research requires the researcher to avoid imposing their own perception of meaning of social phenomena upon the respondent (Banister, 2011). I chose to take a qualitative approach as it "allows room to be innovative and to work more within researcher-designed frameworks" (Creswell, 2013, p.23).

My chosen research analysis method was thematic analysis (TA). TA is the most commonly used method of analysis in qualitative research analysis (Thomas and Harden, 2008; Guest et al., 2011) and is used for identifying, analysing and reporting (themes) within data (Braun and Clarke, 2006). The method of analysis is driven by both theoretical assumptions and the research questions. TA was therefore an ideal method for my research, which involved a search for themes that emerged as being important to the description of the phenomenon, i.e., formal mentoring in the HE sector (Daly et al., 1997) through careful reading and re-reading of the data (Rice and Ezzy, 1999, p.258).

With TA, interview responses are not grouped according to pre-defined categories but rather by categories of meaning and relationships between categories derived from the data through a process of inductive reasoning. This was precisely what I was aiming to

achieve. TA is a form of pattern recognition within the data, where emerging themes become the categories for analysis.

As TA was my chosen method of analysis, I employed an inductive rather than a deductive approach to my research. The emergent qualitative analysis enabled the data set to be analysed in an inductive manner by taking the transcripts of the interviews, coding the transcripts using NVivo (section 3.7) and identifying emerging themes through words, i.e., responses to questions.

In summary, because my research involved the study of people, an in-depth qualitative method and an inductive, TA approach were deemed the most appropriate to enable me to make sense of the meanings attached by mentors and mentees to their experiences of formal mentoring in a HE setting.

3.5 Ethical considerations

The British Psychological Society is unequivocal when it states that good psychological research is possible only if there is "mutual respect and confidence between investigators and participants" (Society, 2014, p.4). As my study involved engagement with senior management figures in their roles as mentors and less experienced employees as mentees, potential ethical issues had to be considered. From their analysis of nine social research ethics codes, Bell and Bryman (2007) identify 11 categories of ethical principles. The key principles of the need to protect research subjects by ensuring prior consent, confidentiality and anonymity were all considerations for me when engaging with my interviewees, and all participants in the research were managed according to the British Psychological Society Code of Human Research Ethics (Society, 2014, p.4).

Throughout the research process, I keenly adhered to the considerations relating to disclosure, deception, risk, debriefing, confidentiality and anonymity given in the table below.

Table 3.10 Ethical considerations

Principles and ethics	Action
Disclosure	Prior to the research commencing, ethical permission was sought through the University of Bath to conduct the research within my own institution. Email correspondence from the Director of Studies granting this permission was provided to all participants.
Deception	There was no concealment or deception when seeking and recording the interviews where information gained might encroach on privacy. On meeting with each interviewee I sought permission to record the interviews, which lasted between 45 to 60 minutes. This was to facilitate the transcribing of each interview for the purpose of conducting robust analysis of the conversations through the utilisation of thematic analysis.
Risk	It was very important to me as the researcher that participating in the study would involve no undue risk to the participants. My relationship with the interviewees was paramount. I needed to establish trust prior to and at the commencement of each interview so as to ensure participants were confident that what was being discussed, which at times could be perceived as negative or critical, would be treated in a confidential manner.
Confidentiality and anonymity	Interviewees were guaranteed that the contents of the interviews would be treated as 'strictly confidential', names would not be utilised and no comments received would be attributed to any one named individual. My role in matching the pairs also meant that I was aware of who the participants were discussing without the need for any names to be mentioned. All participants willingly agreed and such assent was taken at the beginning of each interview.

My role as a key member of the establishing committee of the mentoring scheme in the case study institution was important to establishing this trust. The primary motive of my research, which was to learn from the experience of those who had been directly involved in the scheme with a view to growing and developing the scheme and contributing to narrowing the identified gaps in the research, was clearly communicated to the participants in advance. Establishing rapport and building trust with respondents was crucial so they would feel comfortable being open and honest with me about their experiences (Wiles et al., 2008). My perception of the interviewees was that they felt comfortable sharing information with me; I am confident that the transcripts support this.

3.6 Data-gathering steps

Table 3.11 sets out the steps I undertook and the timelines I worked towards when gathering the data.

Table 3.11 Data-gathering steps and timelines

Steps	Methodological tools	Participants	Contribution to the research	Timelines
Step 1	Literature review		Key themes established that informed the questions (Figure 2.2; Tables 3.16, 3.17 and 3.18	2014–2017
Step 2	Focus group	Mixed group of mentors and mentees who had been involved in the Formal Mentoring Scheme. Gender – 12 interviewees: 7 female and 5 male	The focus group took a semi-structured approach, broadly piloting the semi-structured questions, informed by the literature (Table 3.12) to inform the interview guide in the one-to-one semi-structured interviews	16 January 2016
Step 3	Semi-structured interviews	27 one-to-one, semi-structured interviews 13 mentors (5M, 8F) 12 mentees (4M, 8F) 2 mentees/ mentors (2F)	The 27 interviews (lasting approx. 45 mins. each) gathered direct feedback on the interviewees' experience of the formal mentoring scheme in the case study institution	June 2016 to January 2017
Step 4	Analysis of the data utilising TA and NVivo Tools		A thorough analysis of the rich data gathered, through coding, mapping of conceptual categories and the production of an audit trail	January 2017 to January 2018

The first step in my research involved a comprehensive review of the literature to identify key themes for investigation in interviews; the literature review informed the interview guide given in tables 3.16, 3.17 and 3.18.

In step 2, I conducted a focus group with a mixed group of mentors and mentees (section 3.7.3). The purpose of the focus group was to utilise the themes established from the literature review and to add a further dimension to the topics to investigate in the interviews, thus further informing the interview guide.

To provide the study with the quality, depth and richness (Geertz, 1973) required for a strong substantiated outcome, in step 3, I conducted 27 (18F, 9M) one-to-one, semi-

structured interviews in the case study institution with 13 mentors (8F, 5M), 12 mentees (8F, 4M) and two females who acted as both mentees and mentors (Table 3.8).

Finally, in step 4, I undertook a thorough and robust analysis of the data using TA and NVivo tools.

3.7 Research methods

3.7.1 Qualitative approach

Having first-hand knowledge of the subject matter, I chose a qualitative approach and used such interventions as focus group and one-to-one interviews. Qualitative research "is an approach for exploring and understanding the meaning individuals or groups ascribe to social or human problems" (Creswell, 2013, p.4), and so was appropriate to my research given that my aim was to glean from mentors and mentees information about their direct experiences with the case study institution's formal mentoring scheme.

However, when deciding on my research methodology, I was very mindful of the weaknesses often cited about qualitative research, such as it being labour intensive and potentially giving rise to difficulties around analysis and interpretation of the data. In the past, policy makers have ascribed low creditability to studies based on a qualitative approach (Easterby-Smith et al., 2012); this influenced my decision to utilise a data analysis tool from the outset (section 3.9). Other potential weaknesses often cited include the poor reliability of findings, which result in weak claims that cannot be justified. However, as the versatility and value of qualitative methods is evidenced through its widespread use in many social science disciplines and in commercial social research (Gaskell, 2000, p.39), this credibility problem appears to be lessening.

My research was conducted using a mixed-methods qualitative approach: a triangulation approach to the investigation of my research question through a single case study (3.7.2), a focus group (3.7.3) and 27 one-to-one, semi-structured interviews (3.7.4).

3.7.2 The case study

Case studies are particularly useful in answering 'how' and 'why' questions about contemporary events (Meyer, 2001) and were, therefore, very appropriate to my research. I have already outlined why a formal mentoring scheme was implemented in the case study institution. The 'how' relates to how the scheme was implemented, how that process was undertaken, what outcomes were experienced by the mentors and mentees and how the findings contribute to our understanding of mentoring from a knowledge-based perspective.

Almost any phenomenon can be examined by means of a case study (Yin, 2013). Case studies are used when the researcher intends to support his/her argument by an in-

depth analysis of a person, a group of persons, an organisation or a particular project. The case study is not limited in value; rather, it provides an in-depth analysis of a specific problem (Yin, 2013). In my research, this applies to the experience of the mentors and mentees who participated in a formal mentoring scheme in the case study institution.

Case study research can be based on single case or multiple case studies; whether single or multiple, the case study can be descriptive or explanatory (causal). A single case study focuses on a single case only, which some researchers cite as a weakness. Others, however, argue that a single case study focuses on complex situations while taking the context into account (Keen and Packwood, 1995), thus capturing the holistic and meaningful characteristics of events (Yin, 1994), which, in my research, are those of formal mentoring.

I did consider using comparative case studies to compare and contrast, but as the case study institution is the only institution within the Irish HE sector to have a formal mentoring programme for all staff, there was no direct comparator. However, I did conduct interviews in Queen's University Belfast, which provided us with support when we set up our scheme and with which we have worked closely since; the feedback from the interviews forms part of my findings.

According to Hamilton and Corbett-Whittier (2012, p.11) "a case study attempts to investigate a single unit or organisation, is located within a professional community, focuses on collecting complex and rich data, uses a variety of data collection tools and requires the researcher to spend time in the community as the researcher may collect data over an extended period of time". As the in-depth case study is my own institution, all the key characteristics set out by Hamilton and Corbett-Whittier (2012) apply. The case study institution's professional community, of which I am a member, comprises over 1,569 full-time employees, to whom I have access. Within the institution, over 60 mentors have been trained and over 80 mentees have engaged in a formal mentoring scheme.

When deciding to use a case study, I was extremely mindful of the criticisms levelled on the case study method. However, I stand over my decision to use it because, in my opinion, the case study was ideally suited to the subject under review due to rich data available to me from the case study institution.

3.7.3 The focus group

Kitzinger and Barbour (1999, p.4) define focus groups as "group discussions exploring a specific set of issues" that are "focused" because the process involves "some kind of collective activity". A focus group provides an avenue for "tapping into human tendencies, attitudes and perceptions relating to concepts, products, services or programmes and are developed in part by interaction with other people" (Krueger, 1994, p.10).

The idea behind the focus group method is that "group processes can help people to explore and clarify their views in ways that would be less easily accessible in a one-to-one interview" (Rabiee, 2004, p.655). While I do not agree that focus groups are more effective than one-to-one interviews, I am of the opinion that focus groups are a useful tool for framing the areas that you want to explore in more depth in one-to-one interviews. As a qualitative research method, focus groups can work well if a good group dynamic is established and the participants are personally engaged in the topic under discussion, which was the case in this study. To be effective, the researcher must play a key role in establishing connectivity between the group participants by actively encouraging the group to interact with each other, giving the method a high level of face validity because what participants say can be confirmed, reinforced or contradicted within the group discussion (Krueger, 1994).

Mentors and mentees were invited through open invitation to participate in the focus group for the purpose of gathering feedback on their experience with formal mentoring. Twelve staff members (7F, 5M) attended. The findings from the focus group are presented in Chapter 4, section 4.3.

The focus group afforded participants the opportunity to share their own personal experiences, exchange anecdotes and comment on each other's experiences and points of view (Rabiee, 2004). I found that the focus group took the research in new and often unexpected directions (Rabiee, 2004, p.655). My decision to commence the data-gathering process with a focus group provided depth to my research and added a further dimension to the topics investigated in the interviews.

Table 3.12 The focus group questions

Purpose of the question	Focus group question	Literature sources
Experience with formal mentoring The role of mentoring, formal versus informal mentoring and mentoring responsibility	**Q.** Within the group how many of you have direct experience with the Formal Mentoring Scheme – as mentors? As mentees? **Q.** How would you rate that experience?	Eby et al., 2010 Levinson et al., 1978; Garavan and McCarthy, 2008; Rock and Garavan, 2011
Volunteering to become a mentor Why are mentors prepared to sacrifice their time and their energies in order to support and assist others for no apparent tangible rewards?	**Q.** Why did you volunteer? **Q.** Is the process of volunteering to become a mentor effective? How do you think this might be improved?	Ragins, 1999 Gibb, 1999
The social exchange view – 'element of reciprocity'?	**Q.** Did acting as a mentor enhance your own career in any way?	Gibb, 1999; Daloz, 1986

	Q. What development if any did you experience personally from acting as a mentor?	Swart and Kinnie, 2010
The matching process	**Q.** What is your experience with the process? **Q.** Do you thinking the process is good and if not how might it be improved?	Gardiner et al., 2007 Merriam et al., 1987 Woodd, 1997
Trust The establishment of trust and empathy and the quality of the trust established is also critical to the success of the mentoring relationship The 'ba', the socialisation aspect, must be right for effective mentoring to take place	**Q.** How important was confidentiality to you as a mentor/mentee? **Q.** As the Formal Mentoring Scheme matches mentors and mentees from different departments what is your opinion on whether mentees should be required to notify their head of department/manager that they have a mentor and who that mentor is?	Fouché and Lunt, 2010 Bozionelos and Wang, 2006 Nonaka and Takeuchi, 1995 Mowday et al., 1979
Mentoring and knowledge Mentoring relationships, it is deemed, can provide mentees with important opportunities for learning and insights 'Mentoring is a powerful form of knowledge creation that delivers new ideas to organisations'	**Q.** What type of learning, knowledge transfer if any took part in your mentoring relationships? **Q.** Was this of value to you?	Swart et al., 2014 Colliver, 2002
	Q. What was the key learning outcome of your experience?	Greenhaus et al., 2009 Nonaka and Takeuchi, 1995; Nonaka and Konno, 1998; Nonaka et al., 2000 Mowday et al., 1979
Tacit knowledge The importance of tacit knowledge in organisation learning has become the focus of considerable attention in recent literature. The creation and transfer of tacit knowledge within mentoring plays a key role	**Q.** Can you give any examples of the transfer of tacit knowledge between you and your mentor? **Q.** What did you do with this knowledge? **Q.** Did this knowledge turn at any stage from tacit to implicit knowledge?	Bryant, 2005 Nonaka et al., 2000
Outcomes Having a mentor has been related to job and career satisfaction, concluding that overall mentoring and	**Q.** Has involvement in the Mentoring Scheme resulted in any tangible or intangible outcomes for you as a mentor or mentee?	Kammeyer-Mueller and Judge, 2008

'career mentoring' are strong predictors of career success and therefore as a result of mentoring mentees are successful in securing promotion, increasing salary		

3.7.4 The interviews

One of the main reasons for conducting qualitative interviews is to understand "how individuals construct the meaning and significance of their situations . . . from . . . the complex personal framework of beliefs and values, which they have developed over their lives in order to help explain and predict events in their world" (Easterby-Smith, 1991, p.73). Researchers must, therefore, be able to conduct interviews so that there is an opportunity to gain such insights. Failure to achieve this could result in a superficial exchange of information, which might have been better and more cost-effectively achieved through a semi-structured questionnaire (Bryman and Bell, 2003).

As this interpretative research involved studying human interactions and the benefits, or otherwise, that would accrue from formalising such interactions, there was merit in the decision to conduct in-depth qualitative, face-to-face, semi-structured interviews. I believe the interviews were effective in helping me glean evidence of the participants' perceptions of their specific experiences (Isabella, 1990; Smith, 2015).

The grades and gender of the interviewees are specified in tables 3.13, 3.14 and 3.15, respectively. The sample group represents 30% of those who participated in mentoring. As more women than men (81%: 19%; 67F, 16M) participated in the scheme, more women (18F) than men (9M) were interviewed. Participants were invited by open email to participate in the study. I also made direct contact with potential interviewees to ensure I had a good balance of both mentors and mentees.

Table 3.13 Mentor interviews by grade and gender

Level	No.	F	M	Code
Professor	4	1	3	MR2, MR5, MR6, MR11
Associate Professor	1	1	0	MR8
Senior Lecturer	5	3	2	MR3, MR4, MR9, MR12, MR13
Lecturer	1	1	0	MR7
Senior Manager	2	2	0	MR1, MR10
Totals	**13**	**8**	**5**	

Table 3.14 Mentee interviews by grade and gender

Level	No.	F	M	Code
Senior Lecturer	2	2	0	ME2, ME3
Lecturer	2	1	1	ME5, ME8
Lecturer below the Bar	1	0	1	ME11
Senior Research Fellow	1	1	0	ME7
Research Fellow	1	0	1	ME9
Senior Librarian	1	1	0	ME1
Librarian	1	0	1	ME4
Executive Administrator	3	3	0	ME6, ME10, ME12
Totals	**12**	**8**	**4**	

Table 3.15 Mentee/mentor interviews by grade and gender

Level	No.	F	M	Code
Professor	1	1	0	ME/MR1
Associate Professor	1	1	0	ME/MR2
Totals	**2**	**2**	**0**	

* Acted as both mentee and mentor

The decision to conduct semi-structured interviews was influenced by the need to gather direct insights into mentoring relationships through establishing rapport and trust with the mentees and mentors. As a qualitative researcher, I favoured the use of a face-to-face, semi-structured interview over a structured interview or questionnaire. While a structured questionnaire would probably have provided me with more quantitative data, the results would have lacked those valuable insights gained by establishing trust and rapport from face-to-face interactions, which allow "respondents to say what they think and to do so with greater richness and spontaneity" (Miller and Brewer, 2003, p.167). Semi-structured interviews enabled me to engage in a dialogue, modify questions where necessary and "probe interesting and important areas which arise" (Smith, 2015, p.57).

When conducting the semi-structured interviews, I was very conscious of the need to be sensitive to issues around power, such as, for example, when some mentees were concerned that they might be appearing critical of their mentor – often a person of power within the institution. The interviewees wanted to be open and honest about how the mentoring relationship had worked, and I was, therefore, conscious of the need to be willing to allow participants to tell their own story in their own way (Holloway and Wheeler 2013). As well as having excellent communication skills, both verbal and non-verbal, researchers must be skilled in reflexivity so as to be aware of their own impact on the interview environment.

Access to participants is key to ensuring a robust qualitative study. The availability within the case study institution of 27 mentors and mentees to undertake one-to-one interviews provided my research with the robustness it required. As a research

technique, however, interviewing requires large amounts of gross and net time to arrange, travel to and from and conduct each interview and then transcribe, analyse, code and collate the overall findings (Miller and Brewer, 2003). While time was a factor for me, it did not adversely affect the research.

Taking a semi-structured approach ensured that interviewees had the opportunity to be reflective and fully discuss their views openly with me (Bryman and Bell, 2003) and enabled me to delve further into any topic that potentially could be of value to my research (Alasuutari et al., 2008). The answers to these follow-up, probing questions helped me gain insight into how individuals perceive the quality and value of mentoring, what type of knowledge was shared and what key outcomes, if any, they attributed to the mentoring relationship. Using an interview guide, which meant that common information was sought from all interviewees, lent a degree of structure to the interview process. The semi-structured process allowed me to vary the order and phrasing of questions, where necessary, and to ask probing questions. This flexible process (Bryman and Bell, 2003) enabled me to collect rich data.

Since the raw data from the interviews are quotations, the most desirable data format to obtain is a full transcription of the interviews. Although transcribing is time consuming, transcripts can be enormously useful when analysing data or, later, when replicating the data or having it independently analysed (Bryman and Bell, 2003). In my research, the interviews were transcribed verbatim either immediately or shortly after each interview. Each interview lasted between 30 and 50 minutes. The transcripts ran to 535 pages in total, which gives an average length of 20 pages. Appendices provide sample verbatim responses under each research theme.

3.7.5 The role of the literature in informing the research

I see the literature review as a key component of my research. As set out in Chapter 2, having a framework around which I structured my literature review (Figure 2.1) helped me limit the scope of my inquiry and convey the importance of the “topic to readers” (Creswell, 2012, p.29). In my opinion, the literature review represents the most important step of the research process in qualitative, quantitative and mixed research studies (Leech and Onwuegbuzie, 2011; Onwuegbuzie et al., 2012). I share the opinion of Onwuegbuzie et al. (2012) that a thorough literature review strengthens qualitative studies and can “distinguish what has been undertaken and what needs to be undertaken, identify variables that are relevant to the topic” and “identify relationships between theory/concepts and practice” (p.1). It avoids unnecessary replication and, in itself, helps identify the research gap that you hope your study is going to help narrow.

According to McCracken (1988), a good literature review has many obvious virtues, not least to inform the interview questions to be asked. Tables 3.16, 3.17 and 3.18 set out how the literature framed the interview questions and how these questions formed a guide for the semi-structured interviews.

3.7.6 The interview questions

The main aim of the interviews was to explore individual mentor and mentee perceptions of the mentoring relationship. A further aim was to contribute to narrowing the identified gaps in knowledge on formal staff mentoring in the HE sector, i.e., the 'what' of the study.

"Good qualitative interview questions should be open-ended, neutral, sensitive and clear" (Patton, 2002, p.352). Tables 3.16, 3.17 and 3.18 provide a clear theoretical framework that maps the research questions to the theoretical perspective raised in the literature. The questions acted as a guide for the semi-structured interviews.

The overarching aim of my research was to present a new, knowledge-based perspective of formal staff mentoring in HE with a view to narrowing the identified research gap. In seeking to achieve this aim, I reviewed three strands of mentoring – context, process and outcomes – through these four key sub-research questions:

<u>The mentoring context</u>

- SRQ1: What are the contextual factors that influence the mentoring process from the perspectives of the mentee and mentor within a HE context?

<u>The mentoring process</u>

- SRQ2: What is the nature of the matching process?
- SRQ3: How does knowledge sharing and transfer take place within the mentoring process?

<u>The mentoring outcomes</u>

- SRQ4: What are the key outcomes of the mentoring process as experienced by both mentees and mentors?

Prior to undertaking the one-to-one interviews, I put a range of questions to a focus group (section 3.7.3). The questions were further refined for the interviews, as set out in tables 3.16, 3.17 and 3.18.

Table 3.16 The research question mapped against the theoretical perspective raised in the literature: mentoring context

The Mentoring Context SRQ1 – What are the contextual factors that influence the mentoring process from the perspectives of the mentee and mentor within a HE context?		
Interview questions	**Purpose of the research questions**	**Theoretical perspective literature sources**
Trust • Was trust established within your mentoring relationship? • How was this established? • Was your mentoring relationship confidential or did you feel obliged to inform your own manager that you had a mentor external to the department?	To determine the importance of trust and how trust is established within formal staff mentoring relationships	Bozionelos and Wang, 2006 Greenhaus et al., 2009 Fleig-Palmer and Schoorman, 2011 Kram, 1983 Ragins and Verbos, 2007
Gender • Was the gender of your mentor/mentee important to you? • If important, why?	To determine if the gender of the mentor is important to the mentee	Ragins, 1989 Hamrick, 1998 Hopkins, 1999 Gibson, 2006 Schuller, 2017 Wirth, 2001 Bodsworth, 2011 Bhopal and Brown, 2016
Mentoring attributes • What key attributes do you think a mentor should possess? • Were there any particular qualities/attributes that your mentor/mentee had that had a positive/negative impact on the mentoring relationship? • What attributes are important to consider in mentoring relationships?	To establish what key knowledge, attributes a mentor should possess to ensure a successful mentoring relationship	Cameron and Blackburn, 1981 Clutterbuck, 2004 Clutterbuck, and Ragins, 2002 Ragins, 2016 Rock and Garavan, 2011

Table 3.17 The research question mapped against the theoretical perspective raised in the literature: mentoring process

The Mentoring Process The matching process; SRQ2 – What is the nature of the matching process? SRQ3 – How does knowledge sharing and transfer take place within the mentoring process?		
Interview questions	**Purpose of the research questions**	**Theoretical perspective literature sources**
The matching process • How did you engage with the scheme? • Were you encouraged by your line manager/head of department to engage in the Mentoring Scheme? • Describe how the matching process was undertaken. • Did you have a choice of mentor? • How was this formalised? • Were you compatible with your mentor/mentee, and if so how was that compatibility established? • Were you given time during working hours to meet your mentor?	To establish how mentors and mentees were matched Was there an element of choice? Were they compatible? If compatible, how was this compatibility established?	Campbell et al., 2000 Kram and Isabella, 1985 Rock and Garavan, 2011 Woodd, 1997
The mentoring relationship • Why did you volunteer to be a mentor? • Did you help your mentee to make contact with other people? With network opportunities? • Have you helped your mentee to become more influential in the organisation? In what way? • Was mentoring training provided? If yes can you outline what was involved in the training?	To establish what type of mentoring relationship was experienced Formal/informal, traditional/relational? To understand how and why developmental relationships emerge Social capital theory? What mentors volunteer to mentor? To establish what kind of supports were provided to the mentor?	Greenhaus et al., 2009; Ragins 2016; Harney, 2012; Levinson et al., 1978
Mentoring and knowledge • Can you set out the type of information that was shared within the mentoring relationship, e.g. practical information or more general, tacit type information? • Can you give me some examples? • Can you take yourself back to a moment in time when you experienced a real moment of learning/breakthrough within the mentoring relationship? • What triggered this? • Can you describe how you engaged in this process? • How did you use the sources of what your learnt afterwards?	To determine how knowledge sharing takes place within the mentoring relationship To understand what type of knowledge is shared between the mentoring pairs To establish whether mentoring is a vehicle for enhancing personal learning Does a mutual practice exist where both the mentor and the mentee are learners within the relationship?	Nonaka and Takeuchi, 1995; Nonaka et al., 2000; Mowday et al., 1979; Polanyi, 1966; Rock and Garavan, 2011; Ragins, 2016; Blackwell, 1989; Greenhaus et al., 2009; Mavrinac, 2005 Bryant, 2005; Andreeva and Ikhilchik, 2011

Table 3.18 The research question mapped against the theoretical perspective raised in the literature: mentoring outcomes

Mentoring outcomes SRQ4 – What are the key outcomes of the mentoring process as experienced by both mentees and mentors?		
Sub-research question (SRQ4)	**Purpose of the research questions**	**Theoretical perspective literature sources**
• Has involvement in the Mentoring Scheme influenced/strengthened your own career in any way? • Did involvement in the Mentoring Scheme have any intrinsic outcomes for you? If yes, can you give examples? • Has involvement in the Mentoring Scheme resulted in any tangible (extrinsic) outcomes for you (e.g. promotion, increased salary, more publications)? • Can you give examples of any other outcomes that resulted from involvement in the Mentoring Scheme? • Has involvement in the Mentoring Scheme influenced/strengthened your own career in any way? • What development if any did you experience personally from acting as a mentor? • Would you see mentoring as an important part of your own professional development? • Are there any negative aspects to formal mentoring in your experience?	To determine what, if any, tangible/intangible outcomes were experienced by those involved in the Mentoring Scheme Does a mutual practice exist where both the mentor and the mentee benefit?	Kammeyer-Mueller and Judge, 2008 Gibb, 1999 Young and Perrewé, 2000 Kram and Isabella, 1985 Lankau and Scandura, 2002 Nonaka et al., 2000 Putnam, 1995; Seibert, 1999; Bozionelos, 2006 Johnson, 2015

3.8 Analytical approach

The aim of my research was to contribute to our understanding of formal mentoring from a knowledge-based perspective and to address the four sub-research questions set out in section 3.7.6 above. When choosing a data analysis tool, I was cognisant of the need to use a tool that would enable me to analyse the focus group and interview data to produce new, rich findings.

As set out before, qualitative research takes a holistic account of contexts within which human experiences occur and is thus concerned with learning from particular instances or cases, as is the case with my research. I wanted to connect with mentors and mentees in HE to present a new, knowledge-based perspective of formal staff mentoring by establishing what knowledge is exchanged, what learning is experienced and what outcomes, if any, result from the mentoring relationship.

Maykut and Morehouse (1994, p.18) point out that “words are the way that most people come to understand their situations; we create our world with words; we explain ourselves with words; we defend and hide ourselves with words”. The task therefore for me as the researcher was to find patterns within the words by staying as close to the construction of the world as the participants originally experienced it (Maykut and Morehouse, 1994) and presenting these patterns to inform our understanding of mentoring from a knowledge-based perspective. This inductive approach commences with a focus of inquiry that takes the researcher on a voyage of discovery, as in the case of my research. Research outcomes are not broad generalisations but contextual findings. As Mintzberg (1979) outlines, there are two main steps in inductive research – the tracking down of patterns and a creative leap in which there is generalising beyond the data.

There are many different approaches to data analysis, which have been widely debated in the social sciences literature (Miles and Huberman, 1994; Bryman, 2004). All involve the researcher using manual and/or computer-assisted methods in their data analysis. Using software in the data analysis has been thought by some to add rigour to qualitative research (Richards and Richards, 1994). Taking into account the subjective nature of my research participants’ perceptions, my role as a researcher was to interpret the data gathered (Bryman and Bell, 2003). Moreover, in choosing a qualitative approach to data gathering (in-depth, semi-structured interviews) and subsequent data analysis, I was cognisant that each interview, while uniquely situated, does not stand alone but rather has meaning when compared with the other interviews.

I conducted a thorough review of the suitability to my research of qualitative data analysis methods for analysing the dataset, including grounded theory, content analysis, disclosure analysis, narrative analysis, TA, case studies and interpretative phenomenological analysis (IPA).

The two approaches I considered in detail were TA and IPA because they are deemed to be the most suitable qualitative methods for the study of people. IPA is an experiential qualitative approach to the scientific inquiry of human experience. IPA is phenomenological in that it is concerned with a detailed examination of personal lived experience. It is interpretative because it involves active interpretation on the part of the researchers. It is idiographic because it involves the detailed study of a particular case before moving to more general claims. IPA is now used extensively by researchers in the fields of health, clinical psychology and social psychology and by researchers in cognate disciplines in health and social sciences.

I chose to use TA because I felt it provided me with a flexible method of data analysis and allowed me to engage in the analysis. TA is a relatively easy and quick method to apply, particularly for someone in the early stages of their qualitative research career (as in my case). TA can be applied across a range of theoretical and epistemological

approaches; it is very pertinent to my research, which is taking a knowledge-based perspective of mentoring.

Critics argue that reliability with this method is a concern because of the wide variety of interpretations and the over-reliance on the presentation of themes supported by participant quotes as the primary form of analysis rather than as an outcome of rigorous data analysis processes (Bazeley, 2009). While taking this into account, I felt TA was the best fit with my particular research (Guest et al., 2011). While influenced by the SECI model (Nonaka and Takeuchi, 1995), which claims that knowledge conversion begins with the acquisition of tacit knowledge, a process Nonaka et al. (2000) refer to as socialisation, the aim of my research was to apply a new lens to mentoring by taking mentor and mentee feedback on formal mentoring within the HE sector on board, interpreting the feedback from a knowledge-based perspective and presenting the feedback in a model (Figure 2.1).

Although qualitative research is not given to mathematical abstractions, it is systematic in its approach to data collection and analysis. When analysing the data generated from the interviews, I did not group the responses according to pre-defined categories; rather, I derived from the data salient categories of meaning and relationships between categories through a process of inductive reasoning known as coding (QDA Training, 2016) The process initially resulted in 28 codes/nodes, as set out in Table 3.19. Coding enabled me to analyse the responses in a methodical way and integrate the responses into my model, i.e., a knowledge-based view of mentoring within the HE sector (Figure 2.1).

This approach involved breaking down the data into discrete segments or units of meaning (Maykut and Morehouse, 1994) and coding them to categories. Categories arising from this method generally take two forms: those derived from the participants and those that the researcher identifies as significant to the project's focus of inquiry informed by the literature – in my case, a knowledge-based perspective of formal mentoring within a HE context. The key categories derived were mentoring context, mentoring process and mentoring outcomes (Figure 2.1).

Table 3.19 Initial coding

	Nodes	Sources	References
1	Difference between mentoring and coaching	12	27
2	Formal versus informal mentoring	22	71
3	Knowledge sharing – advice	25	152
4	Explicit knowledge	4	7
5	Tacit knowledge	23	128
6	Learning	11	27
7	Mentees' experiences	10	43
8	Mentors' experiences	8	13
9	Matching process	24	77
10	Mentee-led	6	9
11	Mentor attributes	14	37
12	Mentor experience	19	96
13	Mentee experience – general	17	108
14	Mentoring and gender	26	99
15	Mentoring as an organisational developmental tool	4	8
16	Mentoring duration	16	32
17	Mentoring goals	21	68
18	Mentoring agreement	7	16
19	Mentoring outcome	18	40
20	Outcomes mentees	24	148
21	Outcomes mentors	13	43
22	Mentoring relationship	13	26
23	Mentoring training	14	20
24	Pro-social networks	7	10
25	Relationships after mentoring	6	8
16	Topics of discussion	18	68
27	Trust	21	56
28	Why volunteer as a mentor	16	44

3.9 Using data analysis software

As set out in section 3.6, I decided at the outset to utilise the data analysis tool NVivo to (i) address a number of the criticisms levelled at qualitative methods of research, such as the poor reliability of findings, and (ii) ensure the study – a single case study – would be robust.

NVivo is a qualitative data analysis software package that enables the researcher to work with unstructured materials to aid in making more informed decisions. SPSS is another computer programme that helps with data analysis. However, SPSS is aimed at statistical analysis and is utilised in the study of quantitative data as opposed to qualitative data. Taking a TA approach helped me identify a number of key themes first from the literature and then from the information collected from respondents. When no codified procedure is used in qualitative analyses, the transition from data to theory is difficult, if not impossible, to grasp. Without this linking process in mind, the reader is

likely to feel that the theory is somewhat impressionistic, even if the analyst strongly asserts that they have based it on hard study of data gathered during months or years of field or library research (Glaser and Strauss, 1967).

The production of an audit trail is one of the most important criteria on which the trustworthiness and plausibility of a study can be established (QDA Training, 2016). NVivo provided me with these tools, as set out in tables 3.19 to 3.22 and in detail in Chapter 4, and allowed me to produce a more detailed and comprehensive audit trail than manual mapping would allow.

NVivo carried out administrative tasks, such as organising the data more, efficiently for me. For example, it is easier and quicker to code text on screen than it would be to manually cut and paste different pieces of text relevant to a single code onto pieces of paper and then store these in a file. NVivo highlights and colour codes the data that I coded, providing evidence that I had conducted a thorough review of the data. Clearly, in this situation, it makes more sense to use dedicated software.

One disadvantage of using data analysis software is potential data loss and over-coding. I prevented data loss by regularly backing up data files and avoided over-coding by following the aforementioned analytical strategy.

3.9.1 Phases and steps taken in the analytical process

Using Braun and Clarke's six-step approach (2006), I undertook eight discrete cycles of analysis across the iterative process of data analysis and further expanded into eight phases to conduct TA using NVivo, as set out in Table 3.20. These cycles involved three separate cycles of coding, two cycles of managing codes, one for initial categorisation of open codes, one for data reduction through consolidating codes into a more abstract theoretical framework (themes) and one that used writing itself as a tool to prompt deeper thinking of the data (Bazeley 2009), leading to findings from which conclusions may be drawn. Table 3.20 sets out the step-by-step approach I took in coding and recoding my data.

Analysing the data involved reading them and noting down initial ideas, words and codes. Each code utilised in NVivo is a word or piece of text from the one-to-one interviews and the focus group transcripts. Over 150 words/themes of significance were initially noted. These were then allocated a clear label to form the initial nodes/codes, as set out in Table 3.19. This was followed by broad participant-driven open coding of the interview transcripts to collect data that was relevant to each code.

Table 3.20 The eight-phase approach to TA

The 6-step approach	**The 8-phase approach (**Braun and Clarke, 2006) Practical application in NVivo
Step 1 Familiarising yourself with the data	**Reading and initial noting**: Transcribing, reading and re-reading the interview data and noting down initial ideas
Step 2 Generating the initial codes	**Open coding**: I undertook the initial coding of the interview transcripts coding all interesting features (NVivo Phase 1 Initial coding and noting) taking the broad categories/themes which were prevalent in the transcripts. 28 separate nodes were established – see Table 3.19
Step 3 Searching for themes	**Categorisation of codes**: Re-ordering of codes/nodes into key themes by grouping related codes and organising them into a framework that made sense for further analysis of the data. As set out in Table 3.21, the themes included the mentoring context, the mentoring process and mentoring outcomes.
Step 4 Reviewing themes	**Coding on**: Breaking down of the restructured themes into sub-themes (coding-on) to offer greater understanding of mentoring and to consider divergent views. See Table 3.22.
Step 5 Defining and naming themes	**Data reduction**: Consolidating codes from preceding cycles into more abstract, philosophical and literature-based themes creating a framework to form the basis of the write-up. See tables 3.20, 3.21 and 3.22, Figure 3.2 and Tables 4.1, 4.2 and 4.3
Step 6 Producing the report	**Phase 6 Writing analytical memos**: Writing analytical memos against the higher level themes to accurately summarise the content of each category and its codes and propose empirical findings against the categories as presented in Chapter 4, tables 4.5 to 4.17
	Phase 7 Testing and validating: Interrogating the data and undertaking a self-audit of the proposed findings
	Phase 8 Synthesising analytical memos: Synthesising the data into a coherent and cohesive well-supported study as presented in Chapter 4

In the design of the data analysis steps as outlined in Table 3.20, I gave consideration to the aim of the study and its underlying philosophical foundation. King (2004, p.267) states that tensions exist "between the need to be open to the data and the need to impose some shape and structure on the analytical process". The objective was to design and undertake a systematic and disciplined data analysis process that encouraged completeness and impartiality (Lillis, 1999) while also recognising the complexity of the data under review and the interpretative nature of the study. Table 3.21 sets out the overarching themes that formed the basis of my model taking a

knowledge-based view of mentoring in HE – Figure 2.1 – to which each of the word/theme codes were then applied.

Table 3.21 Superordinate themes

	Themes
T1 Mentoring context	Mentoring and trust Mentoring and gender Mentoring attributes
T2 Mentoring process	Matching process Mentoring and knowledge Mentoring formal informal Mentoring and gender Trust
T3 Mentoring outcomes	Outcomes – mentees Outcomes – mentors

As qualitative data analysis software is designed to carry out data-organisation tasks more efficiently, I was able to exploit my data to the full through coding text on the screen, which was easier than manually cutting and pasting.

The advantage of using NVivo is that it is a well-recognised tool for organising data. As Fielding et al. (1998) explain, qualitative researchers want tools that support analysis but leave the analyst in charge. As the software records data movements and coding patterns, and mapping of conceptual categories and thought progression, it renders all stages of the analytical process traceable and transparent. This helped me to produce a detailed and comprehensive audit trail (Table 3.22 and Figure 3.2), consolidating the codes from the preceding cycles into the main conceptual themes.

Table 3.22 Defining and naming the themes

Phase 5 – Defining and naming themes	**Interviews coded**	**Units of meaning coded**
SRQ1 – Mentoring context	29	219
Trust	21	57
Mentoring and gender	27	107
Mentor attributes	17	55
SRQs 2 & 3 – Mentoring process	30	580
Matching process	25	138
The mentoring relationship	27	251
Mentoring and knowledge	23	151
Mentoring and learning	15	38
SRQ3 – Mentoring outcomes	30	230
Mentee outcomes	25	160
Mentor outcomes	14	47
Institution outcomes	10	15

The final stages 6, 7 and 8 (Table 3.20) involved producing the findings report, summarising the verbatim responses into the themes and presenting the findings in response to the key SRQs set out in Chapter 4.

Figure 3.2 below presents the three key stages of TA that I undertook.

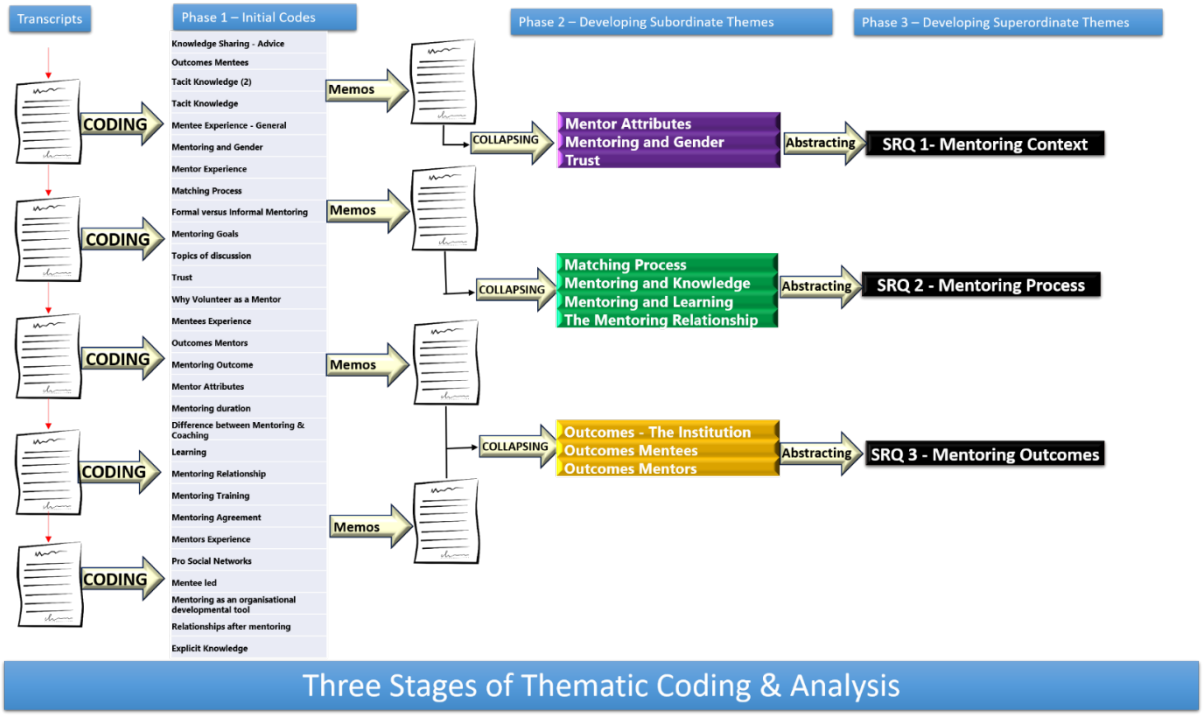

Figure 3.2 Three stages of thematic coding and analysis

3.9.2 Reflection

Having considered many data analysis methods, I made a decision early on in my research to utilise data analysis software, primarily as being so close to the subject matter, I wanted to ensure robust independent evidence-based analysis of my data so that my own biases did not influence the findings in any way. There are many debates as to the appropriateness of data analysis software tools such as NVivo, my chosen tool. However, I certainly support the research that in using qualitative data analysis software researchers do not capitulate the 'hermeneutic' task (Palmer, 1969), the interpretation of the data, to the logic of the computer; rather the computer is used as a tool for efficiency and not as a tool that, in and of itself, conducts analysis and draws conclusions (QDA Training, 2016). As a qualitative researcher, I wanted a tool to support my analysis but that allowed me to be in charge of the analytic process while at the same time providing transparency for the reader. Personally, I see NVivo as adding to the robustness of my data analysis because, arguably, the production of an audit trail is the most important criterion on which the trustworthiness and plausibility of a study can be established. I will set out my thinking in this regard later in this chapter.

3.10 Reliability and validity

Critics argue that reliability with content analysis and TA is a concern because of the wide variety of interpretations that arise from the themes. Another issue raised is the over-reliant on the presentation of themes supported by participant quotes as the primary form of analysis rather than as an outcome of rigorous data analysis processes (Bazeley, 2009; Guest et al., 2011). Krippendorff (2004) explains that where the reliability of data is an issue in content analysis, it is when coders do not understand what they are being asked to interpret, which can give rise to research results that are indistinguishable from chance events.

My response to this criticism is that TA interview responses are not grouped according to pre-defined categories but rather by categories of meaning and relationships between categories derived from the data itself (as set out in tables 3.19, 3.20 and 3.21 and Figure 3.2 and as presented in Chapter 4) through a process of inductive reasoning. For my research, this was precisely what I was aiming to achieve by gathering the experiences of mentors and mentees on their direct involvement in a formal mentoring scheme.

As my research was not testing or validating data and as TA is viewed as an independent qualitative descriptive approach, mainly being described as "a method for identifying, analysing and reporting patterns (themes) within data" (Braun and Clarke, 2006, p.79), I am confident that TA provided an independent, reliable and valid qualitative approach to analysis. By identifying common threads that extended across a set of interviews, I was able to present a qualitative, detailed and nuanced account of the data (Braun and Clarke 2006).

"Agreement is what we measure; reliability is what we wish to infer from it" (Krippendorff, 2004, p.414). Scientific qualitative research must yield valid results in the sense that the research effort must be open to careful scrutiny and it should be possible for any resulting claims to be upheld in the face of independently available evidence (Krippendorff, 2004). Credibility, dependability, confirmability and transferability are the most common measures to use to achieve rigour in qualitative studies (Lincoln and Guba, 2000). From the evidence provided in Chapter 4, I hope I achieved this in my research.

3.11 Limitations

While 27 interviews and a focus group give rise to quite a significant sample, there are limitations in that the sample is from the experience of mentors and mentees from within a single case study HEI. Further studies would be welcomed to compare and contrast the results with other HE formal mentoring programmes to ascertain their experiences. As presented in Chapter 4, any direct correlation that can be established between mentoring and tangible outcomes, such as promotions, is to be welcomed. My research has further limitations in that it focused primarily on gender and mentoring

and did not have the scope to look at mentoring and race, which I strongly feel needs further investigation. Section 5.6 addresses the call for future research in more detail.

3.12 Reflection

As a human resources professional working within the HE sector challenged with designing and managing a formal staff mentoring scheme, this is a research topic of immense interest to me, particularly ascertaining the outcomes that can be attributed to formal mentoring relationships from a knowledge-based perspective. When conducting my research, I was very aware of the case study institution's philosophical and political dynamics (Easterby-Smith et al., 2012). Being so close to the subject matter, I was well prepared to utilise my own judgement when reviewing the data. However, I was extremely mindful of the need to ensure that, as a researcher, my own biases did not affect the outcome of the study and constantly reminded myself not to lead the participants in any way.

3.13 Conclusions

In summary, the aim of this chapter was to clearly set out the methodological approaches adopted for my research. Understanding that there are no perfect research designs, an in-depth analysis of the many methods available was undertaken, after which I came to the decision that a qualitative approach was the most suitable framework (Leedy, 1989; Remenyi, 1999) to use to help me present a new, knowledge-based perspective of formal staff mentoring within the HE sector.

According to Marshall and Rossman (2014), those who conduct qualitative research face a challenge. There are no explicit, guaranteed recipes to follow for pulling together a coherent, convincing, winning research study. Proponents of qualitative research designs do best by emphasising the promise of quality, depth and richness in the research findings, as I have hopefully done in this chapter. Geertz (1973) advises that researchers who are convinced that a qualitative approach is best for the question or problem at hand must make a case that 'thick description' and detailed analysis will yield valuable explanations of processes. While Guba and Lincoln (1981) have made the point that qualitative methods are preferable to quantitative methods when the phenomena to be studied are complex human and organisational interactions and are, therefore, not easily translatable into numbers, as was the case with my research. Guba and Lincoln further support this by emphasising that when researchers use such methods as interview, observation, non-verbal cues and unobtrusive measures, they use tacit as well as propositional knowledge to ascribe meaning to the verbal and non-verbal behaviour that is uncovered. All these components are very pertinent to my research.

Access to participants is key to ensuring a robust qualitative study. Having access to a large number of participants who had direct experience of formal mentoring in the HE sector certainly informed my decision.

As indicated earlier, the questions developed in the literature review were used to inform the interview guide (tables 3.16, 3.17 and 3.18). I used the guide in the face-to-face, one-to-one, semi-structured interviews. In line with Patton's (2002) observation that direct quotations are a basic source of raw data in qualitative evaluation, I present sample direct quotations from the interviews in Chapter 4 and include additional verbatim responses under each theme in appendices 1 to 9. Patton (2002) also noted that direct quotations can help to reveal the respondents' levels of emotion, the way in which they have organised their worlds, their thoughts about what is happening, their experiences and their basic perceptions.

I adopted a TA methodology for my research for many reasons, not least because it provided a flexible method of data analysis and allowed me to fully engage in analysis and not be restricted by pre-defined categories but rather categories of meaning directly related to the research.

The decision to use a software tool for data analysis was one I felt strongly about because such tools provide efficiency and transparency. The use of the analysis software NVivo combined with TA allowed me to work with unstructured materials (semi-structured interview transcripts) to identify key themes from the information collected through the use of codes (nodes). In addition, the ability within the system to produce an audit trail – a key requirement for demonstrating the robustness of my research – greatly influenced my decision. Table 3.20 and Figure 3.2 clearly set out the steps and phases that were undertaken in the interpretation and data analysis. This will be further addressed in Chapter 4.

Finally, the in-depth review of the methodology set out in this chapter highlights the extensive efforts I undertook to produce data that are detailed, reliable, informed and nuanced. The use of a single case study with accompanying in-depth, semi-structured, one-to-one interviews and a focus group was particularly advantageous in the context of this research study. Interviews were used because they provide depth as well as non-verbal and verbal information and the opportunity to probe. They provide greater sensitivity to misunderstandings and more spontaneity in the answers given. Given the complexity of the research question in this study, all of this was required in my research to yield rich sources of data on people's experiences and opinions and to present a new lens through which to view on mentoring from a knowledge-based perspective.

Chapter 4 – Research findings

4.1 Findings

As set out in Chapter 3, my research analysis was undertaken using thematic analysis (TA). TA is a search for themes that emerge as being important to the description of the phenomenon (Daly et al., 1997, p.7); in my case, this is formal staff mentoring in the HE sector. Influenced by the SECI model (Nonaka and Takeuchi, 1995) and to give my research a structure, I posed four sub-research questions to examine mentoring context, process and outcomes from a knowledge-based perspective – see Figure 4.1.

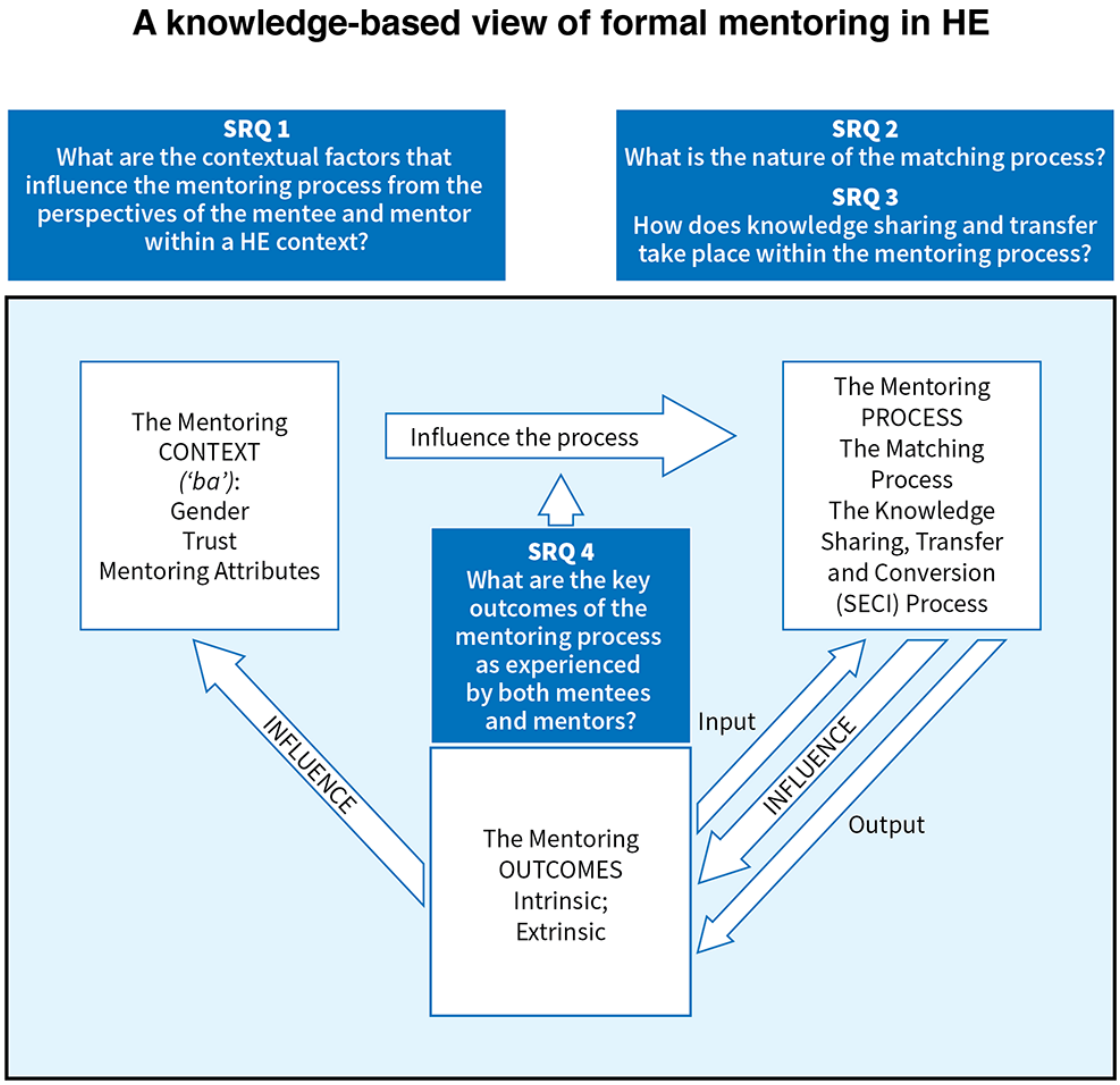

Figure 4.1 A knowledge-based view of formal mentoring in HE (adapted by the author to incorporate the research questions)

Firstly, a comprehensive review of the literature on mentoring and knowledge was undertaken. A sequential deductive inference (based on theory) and inductive inference (based on observation) was used to analyse the data and identify key themes through "careful reading and re-reading of the data" (Rice and Ezzy, 1999, p.258). An

inductive approach was then used to review the literature on mentoring from a knowledge-based perspective. The themes identified were further explored in the focus group, the feedback from which informed the interview guide used in the face-to-face, one-to-one, semi-structured interviews.

I transcribed all the interviews and used TA to identify any new emerging themes. As set out in Chapter 3, TA is a method of identifying, analysing and reporting patterns and themes within data – it "minimally organises and described your data set in (rich) detail" (Braun and Clarke, 2006, p.7). An inductive approach to analysing and interpreting the data identified further patterns and sub-themes within words from the personal lived experiences of mentors and mentees (the interviewees) in the case study institution, as presented in tables 4.1, 4.2 and 4.3. Using inductive reasoning, this process enabled me to make sense of the experiences of the mentors and mentees. This helped me to develop and present (in Figure 4.1) a new, knowledge-based perspective of formal staff mentoring in HE.

The findings presented in this chapter were derived through the methodology set out in Chapter 3, i.e., gathering data through a review of the literature on mentoring from a knowledge-based perspective. I then identified key themes to be further investigated through a focus group and 27 one-to-one, semi-structured interviews in the case study institution. After a thorough analysis of the data using TA and the data analysis tool NVivo, I identified key sub-themes. Figure 4.2 sets out the steps undertaken in my research to present a new, knowledge-based perspective of formal mentoring within the HE sector and to contribute to narrowing the identified gaps in the literature.

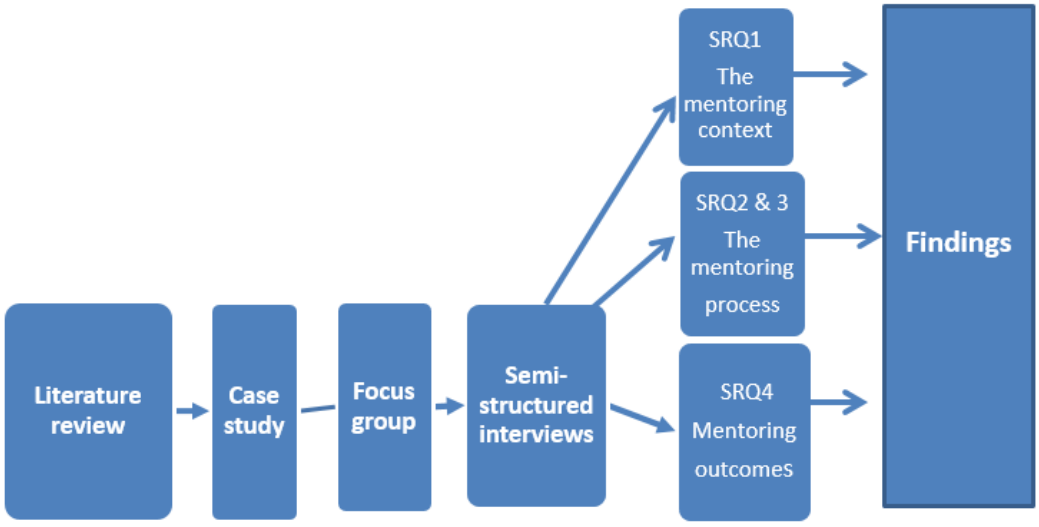

Figure 4.2 The research flow

4.2 Key themes and relevant sub-themes

Tables 4.1, 4.2 and 4.3 present a summary of the sub-themes that emerged from an analysis of the findings against each of the broad themes identified in the literature in answer to the four sub-research questions (SRQs) 1, 2, 3 and 4.

Table 4.1 The mentoring context – broad themes and relevant sub-themes

Literature	The mentoring context		
Sub-research question	SRQ1 – What are the contextual factors that influence the mentoring process from the perspectives of the mentee and mentor within a HE context?		
Broad themes	Trust	Gender	Attributes
Sub-themes/ words from the data collected	Boundaries Building rapport Choice Compatibility Confidentiality Formal agreement Ground rules Open conversation and openness	Ambition Culture Emotional support Gender-proofing language Gender neutral Gender work–life balance Isolation Lack of belief Men as mentors Networking Openness and gender Promotion Support Women as role models	Active listening and sharing Advice Boundaries Coaching Communications skills Confidence Development Empathy Guidance Integrity Interest in people Knowledge and experience Openness Optimistic Politics Power dynamic Problem-solving skills Professionalism Reflective Respectful Sounding board

Table 4.2 The mentoring process – broad themes and relevant sub-themes

Literature	The mentoring process			
Sub-research question	SRQ2 – What is the nature of the matching process?			
Broad themes	The matching process	The mentoring relationship		
Sub-themes/ words from the data collected	Choice Cross-faculty matching Discipline understanding Formal matching Mentor experience Mentoring duration Respect	Formal and informal mentoring A structured approach Commitment Cross-faculty access Formal/informal Formal matching process Mentee-led Recognition Relationship beyond mentoring Mentoring and coaching – mentoring as an organisational developmental tool Mentoring training Motivation to mentor		
Sub-research question	SRQ3 – How does knowledge sharing and transfer take place within the mentoring process?			
Broad themes	Explicit knowledge	Tacit knowledge	Mentees learning	Mentors learning
Sub-themes/ words from the data collected	Grant assistance Institutional knowledge – HR policies Performance management Practical explicit knowledge Promotions guidance Strategic	Advice Career progression – promotion Passion Practical knowledge Proactive Relationship-building, networking Shared experience	Be proactive Career progression Planning Learn from others Relationship issues Support The value of feedback	Improved communications – organisation skills Insight Listening skills Leading by example Value of support

Table 4.3 Mentoring outcomes – broad themes and relevant sub-themes

Literature	Mentoring outcomes		
Sub-research question	SRQ4 – What are the key outcomes of the mentoring process as experienced by both mentees and mentors?		
Broad themes	Mentee outcomes	Mentor outcomes	Institution outcomes
Sub-themes/ words from the data collected	Career path support – career satisfaction Increased confidence – assertiveness Knowledge and learning Negative outcomes Networking and political awareness Plan – focus Positive outcomes Promotions success – research outputs Relationships – friendships Self-reflection – self-awareness Support – emotional/practical	Career enhancement – self-reflection Improved confidence, communications and management skills Knowledge and learning Networking – new relationships/ friendships Personal satisfaction – being valued professionally Promotions Research outputs/collaborations	A mentoring ethos Commitment and support Institutional knowledge Investment Research and funding outputs

4.3 Focus group findings

As set out in section 3.7.3, the decision to undertake a focus group as the first step of my qualitative data gathering was to uncover participant views on the formal mentoring scheme in the case study institution prior to conducting more in-depth, one-to-one interviews. Mentors and mentees were invited through open invitation by email to participate in the focus group. Twelve staff attended (7F, 5M).

The focus group provided depth to my research by enabling me to test the research questions under the key themes of mentoring context, mentoring process and mentoring outcomes. At the stage of the focus group, these were primarily influenced by the literature and my own personal experience. The focus group added a further dimension to the topics to investigate in the interviews. Open discussion was encouraged amongst the group using the questions set out in Table 3.12.

4.3.1 The mentoring context

4.3.1.1 Mentoring and gender

With regard to gender, the group were asked if the gender of the mentor or mentee mattered significantly. There was disparity within the group on this issue. Some women in the group argued that women will often want a female mentor because many of

women's queries would be likely to relate to balancing career and family demands. In contrast, others argued that the gender should not matter and the aim should be to find the best mentor possible for an individual – someone who will be capable of giving the mentee career insights.

A further point raised on gender was that the formal mentoring scheme in its current form seems less applicable to men. The reference to the Women's Forum in the handbook was cited as an indicator of this. This was an interesting point in relation to gender-proofing language; perhaps by attempting to encourage women to avail of mentoring, we inadvertently discourage men from participating.

4.3.1.2 Mentoring and trust

When asked about confidentiality and the establishment of trust within the mentoring relationship, there was consensus that confidentiality and trust are key to an effective mentoring relationship.

4.3.1.3 Mentoring attributes

While the question of mentor attributes was posed to the group, the feedback provided focused more on how to further engage mentors in the scheme as opposed to what skills the group felt mentors should have outside of the establishment of trust.

4.3.2 The mentoring process

4.3.2.1 The matching process

There was a lengthy discussion on the effectiveness of the mentor/mentee matching process. There was unanimous agreement that to be effective, formal processes should remain confidential and information should not be disclosed to managers or heads of department unless a mentee wishes to share the information.

A discussion ensued around mentee involvement in the choice of their mentor. There was unanimous agreement that all mentees wanted to be involved in choosing their mentor; as evidenced in the literature (Chapter 2, section 2.5.1), choice leads to more effective relationships.

To increase the number of mentors signing up for the scheme, it was suggested that, in addition to the open call, the mentoring co-ordinator might contact specific individuals across a variety of disciplines and areas of the university to invite them to become a mentor. The group felt that this would be viewed as complimentary. However, it was agreed that an invitee who felt they were not suited to mentoring, for any reason, could decline the invitation.

4.3.2.2 Mentoring duration and timing

There were disparities between participants with regard to how long the mentoring pairing should run for. Some people felt that the current 12-month timeframe that

applies to the mentoring scheme was too long and that the potential benefits from the relationship could, perhaps, be gained in one or two meetings. In contrast, others felt that a 12-monthtime frame was fine and that some pairs may, in fact, continue their mentoring relationships informally after that point.

4.3.2.3 Learning, knowledge creation and transfer

Feedback on the mentor/mentee training was positive; in fact, almost all participants said it was essential. Participants noted that possibly one of the best elements of the training was a synopsis of 'what mentoring was not' because such clarity set the boundaries for the mentor/mentee relationship on what each should expect from the process. Two of the attendees had not experienced the training and therefore could not comment.

As evidenced by the literature, the importance of tacit knowledge in organisation learning has become the focus of considerable attention (Nonaka et al., 2000). With that in mind, I asked participants to consider the type of information or knowledge that was shared within their mentoring relationships. Responses such as it *"is hard to define the type of information that was shared but I certainly see it as information that is not available anywhere else in the institution or if available you would have to know who and where to go to find it out"* (focus group participant no. 3 (FG3)).

"*It's that information that isn't written in a handbook anywhere", "information that is very much shared in confidence"* (FG4); "*It's the 'mentors own individual experience – invaluable personal information'* (FG6).

4.3.3 Mentoring outcomes

The group members were largely unanimous in their support of mentoring as a concept. Asked if they had experienced any direct intrinsic or extrinsic outcomes from mentoring, two participants (one mentor and one mentee) commented that the mentoring process had most definitely played a crucial role in at least one promotion and the other in securing one competitive funding bid.

Some individuals had been through the process a number of times as mentors and expressed that they had found sharing their career experiences with others an enriching and worthwhile experience. One individual highlighted that they had previously been involved in mentoring an individual who was, in fact, more senior than them (outside the formal scheme) and that while this was more task-focused initially, it developed into a very positive experience. This is something that the mentoring scheme was not initially designed for because, generally, mentors are expected to be one career level/grade above the mentee.

Another point made related to the format of the application form. Some individuals felt that the form requested too much information about the reasons for applying for a mentor (e.g., feeling isolated at work) and on marital/family status, which some people

might find to be off-putting. It was suggested that the form be condensed. More information could be provided informally through the one-to-one conversation with the mentoring co-ordinator following the training.

While the participants noted that mentoring could be a very positive process, not all participants felt that the process had played a direct role in career outcomes. However, they did accept that the knowledge gained in the process had been helpful.

A number of participants felt there should be formal acknowledgement of involvement in mentoring in promotions applications.

4.3.4 Focus group summary

It was clear from the focus group session that in order to extrapolate more meaningful, focused feedback from mentors and mentees, the interview questions to be used in the interviews needed to be further refined. Because the particular aim of my research was to present a new, knowledge-based perspective of formal mentoring and because the responses to the questions were quite vague from the focus group participants, the questions needed to focus more on specifics around the learning experienced and the knowledge shared within the mentoring relationship. In addition, more specific questions in relation to mentoring attributes were needed because little information was forthcoming from the group to the attributes question.

Creating the space – the 'ba' – and, specifically, the time for senior staff to mentor was cited as being particularly important for mentoring to be successful. Respondents felt that volunteering to become a mentor should be acknowledged within the institution's promotions process and workload allocation model (WAM).

Another lesson learned was that in order to encourage more men to become mentees, efforts need to be made to ensure the language and examples cited in the handbook are more gender neutral.

In summary, the dominant themes that emerged from the focus group were:

i. Formal mentoring is valuable as a mechanism for sharing and transferring knowledge between mentors and mentees within the HE sector.
ii. For formal mentoring to be effective, trust needs to be established and confidentiality maintained.
iii. Direct approaches should be made to potential mentors to engage them in the scheme.
iv. Mentor involvement in the scheme should be noted and valued within the promotions process.

4.4 Core research findings

Twenty-seven one-to-one (face-to-face), semi-structured interviews were conducted with 13 mentors (8F, 5M), 12 mentees (8F, 4M) and two mentees/mentors (2F), as set

out in Table 3.7. The two females who acted as both mentors and mentees provided very useful information from both perspectives. The participants represented a 33% sample of the total number of mentees who had been involved in the formal mentoring scheme in the case study institution, i.e., 83 pairs (some mentors had mentored a number of times). It is worth noting that 75% of those who have availed of formal mentoring within the institution to date are women.

The section to follow sets out the key themes that emerged from the interviews. A summary of the frequency of the various labels (sub-themes) that emerged from the analysis of the data is presented in tables 4.1 to 4.17. These are presented under the key sub-themes in answer to the sub-research questions set out in Figure 4.1 and in tables 4.1 (context), 4.2 (process) and 4.3 (outcomes). Appendices 1 to 9 provide further samples of verbatim responses from interviewees under each key theme.

4.4.1 The mentoring context

To answer SRQ1 – *What are the contextual factors that influence the mentoring process from the perspectives of the mentee and mentor within a HE context?*, questions were asked under the broad themes identified in the literature. In particular, the importance of trust and how it is established within the mentoring relationship was examined. In addition, the study explored the extent to which the gender of the mentor was important to the mentee and asked what mentoring attributes were necessary to ensure an effective mentoring relationship. Prompted by the questions specified in Table 3.16, a number of sub-themes emerged (tables 4.4, 4.5, 4.6 and 4.7).

Table 4.4 SRQ1 mentoring context: sub-themes

Sub-themes	Interviewees	References
	29	219
Mentoring and trust	21	57
Mentoring and gender	27	107
Mentoring attributes	17	55

4.4.1.1 Mentoring and trust

As addressed in Chapter 2, the need to establish trust to ensure effective mentoring relationships is very important. My research sought to explore how trust is established within the mentoring relationship. The broad theme of trust captured over eight sub themes as set out in Table 4.5 from 21 sources/interviews.

Table 4.5 Mentoring and trust: sub-themes

Sub-themes	Interviews	References
	21	57
Boundaries	3	3
Building rapport	2	4
Choice	2	2
Compatibility	5	5
Confidentiality	5	6
Formal agreement	3	4
Ground rules	3	3
Openness – open conversation	6	8

The need to **build rapport** within the relationship and how affording the mentee a **choice** (although the matching process is formal) helps establish trust, builds rapport and ensures **compatibility** between mentor and mentee.

*"I don't really think that trust building was, was an issue because I think due to the kind of very careful process of matching mentors and mentees I think the **compatibility** was there right from the start and so trust, trust was there rather than needed to be built"* (Mentee (ME) 8).

Within the formal mentoring scheme in the case study institution, the use of a **formal agreement** clearly establishes relationship **boundaries** and **ground rules**, *"and everybody knew what the expectations were and what the ground rules were and I think that was very important"* (Mentor (MR) 5)*. "You know there was trust in the relationship and that anything that was discussed wouldn't be spoken about outside of that. So there were ground rules set"* (ME6).

While not an official document needing to be signed, interviewees felt that the formal agreement helped clarify the areas mentors do not get involved in. Knowing these boundaries was deemed to be very important, particularly for mentors. *"It's more the discussion where the boundaries are, particularly for a mentor when they are seeing that actually this has gone beyond what this relationship is about. Where someone is struggling and they want advice on handling a manager and then you realise that actually this is ending up in a conflict situation and I'm not the skilled person, I can share my advice but really they may need to go a different process"* (MR1).

To establish trust, there is a need to ensure **confidentiality** – *"And you know it took the mentee I think three or four meetings with myself for them to build up the trust with me. One particular lady, I think she thought that whatever she told me was going back to her line manager. It took me a few sessions to build up that trust and to ensure that she knew that this was 100% cast-iron confidential"* (MR12).

The need for **openness** from both mentor and mentee about their personal experiences and challenges, successes and failures was seen to be crucial to the

establishment of trust. *"I suppose it's giving a little bit of yourself, you know, that you trust the person with some, I wouldn't say intimate knowledge, but personal knowledge"* (M6). However, being open can bring fear, or, as one mentee put it, "*I did worry when I talked to her, I still worry, what I shared with her might be damaging to me in the long term. In terms of how she might perceive me as a complete lunatic with no coping skills because I can't get on with my boss. Do you know that that is a label that could get attached to you …?* (ME1).

Appendix 3 provides further sample verbatim responses from interviewees on the theme of mentoring and trust.

4.4.1.2 Mentoring and gender

As set out in Chapter 2, the topic of mentoring is rarely discussed without discussing mentoring and gender. As evidenced in Table 4.6, it is clear to see that gender is an extremely important aspect of mentoring – the theme attracts over 100 references from 27 interview sources. During the interviews, a number of sub-themes emerged (13), as set out in Table 4.6, which provide the frequency of the various labels (sub-themes) that emerged from the analysis of the findings using NVivo.

Table 4.6 Mentoring and gender: sub-themes

Sub-themes	Sources	References
	27	106
Ambition	3	4
Culture	2	3
Emotional support	2	2
Gender-proofing language	2	3
Gender and work–life balance	2	4
Gender neutral	2	2
Isolation	2	3
Lack of self-belief	1	7
Men as mentors	7	8
Networking	2	2
Openness and gender	5	6
Support	6	14
Women as role models	7	10

In discussing the issue of gender, in particular whether the **gender** of the mentor/mentee was of importance to mentees, a variety of responses was received. There was a sense from some female respondents that their particular preference for a female mentor was down to the fact that they felt women who had successfully progressed through the promotions process would better understand the issues specific to women. *"I would have preferred a woman because I think a lot of issues that pertain to women in terms of progression, I think women are in a better place to kind of advise on that"* (ME10; F). Having access to a woman who is seen by many to be a

role model certainly was seen positively. *"I think maybe for me it was that she was more a role model and that's one of the main reasons maybe why I kind of wanted to have her"* (ME10; F). *"Because it's always good to talk to somebody who totally knows kind of what you're talking about as regards to* ***work–life balance****. And I genuinely think men don't fully understand it"* (ME6; F).

Surprisingly, my research revealed that the gender of the mentor appeared to have less importance than initially envisaged. Of the 27 sources who commented on whether the gender of the mentor/mentee was important, a prevailing thought was that accessing the 'best' mentor was more important that the gender of the mentor. "*Gender should not matter, the aim should be to find the best mentor possible for an individual who will be capable of giving them career insights, irrespective of gender"* (FG2; F)*.* However, as seen above in section 4.3.1.1, some female focus group participants made the case that women might prefer female mentors because they would be concerned with balancing career and family demands.

When the men were asked if they had a preference as to the gender of their mentee or mentor, the predominant response was that what was of greatest importance to the male mentee was being assigned the most successful mentor. "*No, not necessarily because I suppose I am working in a very female environment and most of my management are female as well so I was used to dealing with females but there was no gender issues, no"* (MR4; M).

The value of **men as mentors** and understanding how men operate differently to women was also raised: "*I suppose now, having been here longer, I think I may now have more to learn from a male mentor actually in terms of how, I think how the different genders operate differently in terms of work"* (ME10; F). When asked about mentoring female mentees, one male mentor said, *"It didn't matter to me at all. I have two females now that I've mentored during this process. No, it certainly is, it didn't make any difference to me as a mentor you know, I would have mentored them in the same way as if they were two males. And for them as mentees I think it helps them more to have a male as a mentor and maybe that's because I had quite a bit of knowledge of how the University works and how systems work and how processes work here in the University. But no, I think it took a few sessions, it took about three or four meetings to build up trust and just build up a relationship. But I think the male/female relationship worked very, very well"* (M12; M).

How men and women handle **emotions** differently was raised a number of times. *"I've seen a lot of issues arise within departments because of emotions or, you know, people taking things personally and I think a lot of men are much better equipped to kind of draw the line and they're good at creating boundaries and I think there's a lot to be learnt"* (ME12; F).

Some women cited requiring the mentor to provide emotional support. The evidence shows that women seek mentoring more than men do. Almost three-quarters (70%) of the uptake of mentoring in the case study institution was by women. Furthermore, the findings show that women seek more advice and support. *"I think women tend to go for mentoring more, it's always the women who come back and want advice. Or say, look I'm applying for something, will you read this. I've never had a man do that"* (ME/MR1; F).

Some of the women mentors interviewed felt very strongly about their role in supporting other women, particularly because women are under-represented at senior levels within the sector. One female mentor said she would not visit boys' schools because she feels strongly that "*boys' schools don't need a woman but girls' schools do"* (ME/MR2; F).

Women's **lack of belief** in themselves emerged as a theme. As one mentor commented, *"it was frustrating to observe such lack of belief in women in their own ability ….. The really impressive women didn't seem to have any sense of their own ability. They didn't seem to recognise that they were as good as they were. Or as the men seem to think they were".* She felt the mentees she had encountered wanted to be *"good citizens and in so doing undertook tasks that were detrimental to their careers"* while men, she commented, *"are much more self-centred and capable of minding their own backs"* (MR11; F).

There is, however, a fear that mentoring as a career development tool and support mechanism could, in fact, become '**gendered**'. One female mentor commented that "*I suppose my own experience has been very gendered. So to me a learning that takes place is that there is support out there. That it can be very difficult, to be a woman and a senior woman, or viewed as an ambitious woman in universities. But you will find fellow travellers who will be very supportive. So I mean a woman that I would have used, now retired. I would have used a lot for bouncing things off. Always her line was, look to your supporters, stop looking at the detractors. There'll always be detractors, you'll always be tortured with the people you know, throwing mud and snowballs and all the rest of it. Just listen, you know, look for the supporters, move with them. And perhaps men know how to do that intuitively and women have to learn it" (*MR11; F).

In discussing gender with both mentors and mentees the issues of isolation**, lack of self-belief, vulnerability** and 'cultural differences' were raised. **Social support**, **visibility** and **networking** were also cited as areas for which mentoring was accessed. Further sample verbatim responses on mentoring and gender are presented in Appendix 4.

4.4.1.3 Mentoring attributes

As set out in Chapter 2, there is some evidence that high-quality mentoring requires relational skills, including emotional awareness, listening skills and emphatic skills. To

ascertain if there were any particular mentor qualities or attributes that can have a positive or negative impact on the mentoring relationship, I put a number of questions to both mentors and mentees (Table 3.15). What emerged from the findings of particular pertinence to my research was the importance of certain attributes/qualities such as **active listening**, **integrity**, **empathy**, **professionalism**, **knowledge** and **experience** within the institution and the ability to be a '**sounding board**'. In relation to **professionalism**, one mentee said, "*I think that's key. Again her dynamism, integrity would be hugely valuable and her, again I haven't maybe mentioned it but I suppose her academic approach to her role"* (ME10).

Table 4.7 Mentoring attributes: sub-themes

Sub-themes	Sources	References
	17	55
Active listening	5	8
Advice	7	12
Coaching	2	2
Communications skills	2	2
Confidence	1	1
Development	2	2
Empathy	6	8
Guidance	1	1
Integrity	2	4
Interest in people	2	2
Knowledge and experience	6	9
Openness	2	4
Optimistic	2	3
Politics	2	2
Power dynamic	1	1
Problem-solving skills	1	1
Professionalism	1	1
Reflective	3	3
Sounding board	2	3

Optimism and **openness** were key attributes/qualities that were cited by the interviewees, as were **problem-solving** competencies and the ability to be **reflective** and provide **advice**. All the themes that emerged from the discussions are listed in the table above and presented in Appendix 5. *"You know, is this almost personal supervision as a master/apprenticeship type thing or is it more of a mentoring as in encouraging people and developing the person?"* (MR6).

Knowledge and **experience** within the institution, in particular experience with the mentoring process, were deemed to be key attributes a mentor should possess. As one mentor put it, "*the best benefit is if you've got somebody who's been around the block a*

bit, has seen some of the things, got the tee-shirt and knows the way some things work" (MR8).

Particular to the HE sector was the need for the mentor to have specific experience with the **promotions process**. *"I would be looking for somebody …. who has successfully navigated their way through the promotion process"* (ME11). *"So as long as the mentor has a **knowledge** that is useful to the purpose of the mentee, it doesn't really matter what that relationship is"* (ME/MR2).

Openness and willingness to share successes as well as failures were other cited attributes. *"The other thing is he's very open, you know, so he would share what advice and experience he had to offer readily, every bit as much advice on things that didn't work, things he wouldn't do again, things he saw others do that he wouldn't suggest a third person do".*

Integrity, **honesty**, **empathy**, **communication** and **coaching skills** were all key attributes/qualities/competencies cited by interviewees. Understanding the **politics**, *"the wider politics"* (ME11) and the power dynamic that exist in HEIs was a key attribute required for effective mentoring in the sector. *"Probably communication skills, empathy, experience, I think taking the broader view rather than the short term, kind of trying to look at the holistic picture"* (MR4).

4.4.2 The mentoring process

Chapter 2 describes the knowledge-creating process as the dynamic interaction between organisation members themselves and between those members and the environment, the creation of new knowledge through action and interaction – the SECI process (Nonaka and Takeuchi, 1995). My research sought to investigate the mentoring process, the matching process and the knowledge exchange and learning that takes place within a formal mentoring relationship so as to present a knowledge-based perspective of formal mentoring in HE, my central research aim, and answer the sub-research questions *What is the nature of the Matching Process?* (SRQ2) and *How does knowledge sharing and transfer take place within the mentoring process?* (SRQ3).

The findings are presented in Table 4.8 with respect to each of the sub-themes to reflect the conversations that took place on the matching process, the mentoring relationship, mentoring and knowledge and mentoring and learning. As evidenced in the table, responses on the mentoring process yielded 582 references from 30 sources, i.e., from the focus group and the 27 interviewees. Mentors and mentees made substantial reference to the 'knowledge shared' within their mentoring relationship. In fact, over 151 references from 23 interviews referred to knowledge sharing and learning.

Table 4.8 Mentoring process: sub-themes

SRQ	Sub-themes	Interviews	References
		30	582
SRQ2	Matching process	25	136
	The mentoring relationship	26	221
SRQ3	Mentoring and knowledge	23	151
	Mentoring and learning	15	38

4.4.2.1 The matching process

As set out in Chapter 3, the scheme manager undertakes the matching of mentors and mentees. Section 4.4.1 and its subsections present sample findings on the mentoring context, the importance of trust, gender and mentoring and the importance of certain mentor attributes to the effectiveness of the mentoring relationship. In answer to my question *What is the nature of the matching process?* (SRQ2), the following sections present the findings from the interview conversations on the matching process and the overall mentoring relationship, in particular whether mentoring relationships should be set up formally or allowed to evolve informally within the HE sector.

Table 4.9 sets out the key sub-themes/words identified in relation to the matching process. Sample verbatim responses are presented in Appendix 6.

Table 4.9 Matching process: sub-themes

Sub-themes	Sources	References
	25	134
Choice	8	13
Cross-faculty matching	10	16
Discipline understanding	5	9
Formal matching	7	9
Mentor experience	4	7
Mentoring duration	1	2
Respect	2	3

Overall, **cross faculty/department matching** appears to work very successfully. *"I also wanted somebody to kind of look at it kind of globally or look at you; you know kind of helicopter as distinct from getting caught up in the minute of what is going on in the department"* (ME2). *"It puts you in touch with people outside of your own disciplines, outside of your own faculty. And that can be very refreshing. So for instance, I worked with someone in a different faculty altogether, who I would never have come in touch with. And I think he was able to talk to me in a way that he wouldn't have, if we were in the same department or in the same faculty"* (ME/MR1).

"I'd be leaning more towards that somebody outside of your own area can actually have a less skewed overview because they're not influenced by whatever is going on in the particular area. They can have that more step back and view, and talk to you again

with less, I suppose, less angles really. So I would be a fan, yeah, I'd definitely be a fan of having a mentoring process where you can go outside your own department" (ME7).

Having **respect** for the mentor in a professional capacity was very important to mentees. While the matching is undertaken formally, that element of choice for the mentee in the process was seen to be important. *"Well the matching process worked very well for me, because I was able to get what I wanted. ….So often the matching process can allow you to be matched with somebody that you might never have ever thought of being matched with and yet it could work out to be a very positive relationship"* (ME3).

The **mentors' experience** is also hugely important to mentees. *"It does need to be somebody senior to you and it doesn't necessarily mean someone senior in years. I mean senior to whatever your needs are"* (ME2).

The **formal matching** process appears to have worked extremely well, and respondents were supportive of cross-department matching. "*If I was 'picking' my own mentor that means as a mentee I am limiting myself to the people I know. And I don't think that's a good thing within a mentoring scheme"* (ME/MR2). *"I think it's much better outside of the department, absolutely and completely, just because of all the dynamics that can go on within a department for good, bad or indifferent…. If you go across to another department, they can challenge your thinking and you can see things differently. So it's much better and much more interesting if you're meeting somebody outside of a department or a faculty or anywhere, it doesn't matter, but like not to stay within – I don't think it would grow if the mentoring was devolved down to a department"* (MR7).

However, there was some hesitancy around cross-faculty matching; some respondents cited the need for **discipline understanding** as opposed to discipline knowledge to ensure an effective relationship. *"My own opinion is that if the disciplinary area of the mentor and mentee are in some way related that you're going to have a more successful outcome"* (MR5). However, the distinction between discipline understanding and discipline knowledge was not seen to be core. "*Now they weren't that closely aligned in terms of their specific area exactly, their discipline was more engineering and mine would be the site side. But we spoke each other's language for starters so we had that background"* (MR5). Another mentor commented, *"I find myself now very often working with people from other disciplines and coming from Arts, Humanities and Social Sciences, I feel reasonably well equipped to work with people from education and health sciences because of the overlap with Teacher Education and all of that. I feel relatively comfortable working with people from Business because there are some alignments in terms of discipline and because my background, my original degree is Business. I feel much less comfortable working with people from Science and Engineering because the disciplinary difference is so great*" (MR3).

If the disciplines are disparate, the less likely the mentor and mentee will be to connect. From the responses received, the thinking is that while the mentor does not need to come from the same discipline, the disciplines need to have some alignment. *"But I think a mentee can derive far more granular and useful information from a mentor who understands their discipline in the area. They can "understand what's important and sometimes what's less important. … In many ways it's like chalk and cheese, what's important in one discipline is far less so in another one in terms of, you know, the journals and things like citation factors and all sorts of things like that. So from that perspective I personally am a fan of linking mentors and mentees that are broadly at least in the same general disciplinary area"* (MR5).

While the formal system is not to pair mentors and mentees from within the same departments, if a department is large enough, it can sometimes work. *"What was interesting I suppose about my mentor was that she actually worked in my department. So we were one of the rare department matches, because I think at the time we had decided that we wouldn't have people paired within the same division. The person that I had was phenomenal and I kind of pushed a little bit to make sure I got her, which worked out great. This woman would have been extremely professional and would have been able to manage, I think, a relationship like that whereas maybe other people may not have been so experienced to do something like that"* (ME10).

However, in doing so, that mentee offered some cautionary advice. *"You'd want to be careful around things like favouritism. Confidentiality could be an issue, if there's promotion. … I think you would have to have a very good understanding of the integrity and of the standing of the mentor to be offering people within the same division. It may be that it could work but it may not be worth actually progressing. You know what I mean; it may be safer to go with the option of saying no, you actually can't be in the same department"* (ME10).

The duration of the formal mentoring relationship was discussed, and most agreed that a 12-month timeframe is sufficient to allow the mentee gain access to experienced mentors and to make the most of the time allocated to them.

4.4.2.2 Mentoring relationships

This section presents the findings from the interview conversations on the overall mentoring relationship, in particular whether mentoring relationships should be set up formally or allowed to evolve informally within the HE sector. Sample verbatim responses are given in Appendix 7.

Table 4.10 Mentoring relationships: sub-themes

Sub-theme	Sources	References
	27	253
Formal and informal mentoring	22	73
A structured approach	3	4
Commitment	3	3
Cross-faculty access	2	3
Formal/informal	1	2
Formal matching process	2	3
Mentee-led	3	4
Recognition	3	3
Relationships beyond mentoring	2	2
Mentoring and coaching	12	27
Mentoring as an organisational developmental tool	6	11
Mentoring training	14	21
Motivation to mentor	17	47

There was consensus from the interviewees that a formal mentoring scheme was of more benefit within the HE sector than an informal one. While some felt that informal mentoring should continue to exist, the majority felt that the benefits of a formal mentoring scheme outweighed those of informal mentoring, particularly in relation to providing **cross-faculty access** to experienced mentors. *"I think the benefit of the formal mentor/mentee relationship … that exists here allows you to see across departments and across division. I think it's hugely beneficial"* (ME12).

The formal system provides a **structured approach**. *"I think a structured approach – the more structured it is, the more likely you will get a result…* (MR10).

The **formal matching process** within the mentoring scheme resulted in very positive relationships being established. *"I think it's much better to have a formal matching process. And one where you gather information on what each side wants so that then you can actually engage in an actual matching process. So I thought it worked quite well – the matching process – for me anyway from my perspective"* (ME3).

Leaving the choice of mentor totally up to the mentee and not evoking a formal matching process was certainly felt by some to be fraught with potential problems, particularly for women who would be less assured to seek a mentor from the top. *"The fear would be it gets right back to the original point where we talked about should people choose their own mentor. I mean, how do you know who to go to? How do you? And there could be a very big fear that that could become very gendered very quickly. So that a young man will walk in and say I'm going to the vice president to ask for mentorship but a woman would never do that. So that would be, to me that would be the big fear on that, so I think the matching certainly within our structures would have to be there* (ME/MR2).

With the formal mentoring structures, you are more likely to have **commitmen**t from senior staff to the process. By agreeing to mentor, they are openly committing to the process. *"You would expect to have a higher commitment at the staff level because they know they want to do it and they know what it is about. And certainly the first experience I had the first mentee we had regular like we set up appointments and we agreed that we agreed a contract"* (MR10).

Having an element of recognition, **formal recognition** for acting as a mentor was seen to be important. *"So I think that's good. I think also possibly, having it formalised. More people think of it, more people get the opportunity to do it. There is probably some recognition for it as well. And you can, you know, you can put it on your CV, as a thing that you've benefitted from"* (ME/MR1).

Within the formal mentoring scheme, having the scheme '**mentee-led**' was seen in a positive light: *"and I think that it is mentee-led in terms of mentees can opt to do it or not for whatever their reasons is valuable is very valuable"* (ME1)*. "Well the mentees have to lead it. I don't think it would work at all if you had the mentors chasing…"* (MR10).

The difference between mentoring and coaching is often misunderstood. As outlined previously, while mentors coach within the mentoring relationship, coaching is quite a different intervention. This issue was discussed with the interviewees, and their comments suggest that most of them were very clear on the distinction. *"Coaching is really task driven, whereas the mentoring – and I think it's kind of more, it's classed more on outputs tied back to the day job"* (ME9) and "*while research coaching can fit in to mentorship I don't think mentorship can fit into research coaching"* (ME2)*.*

Both mentors and mentees valued the **training**. "*Yes that was extremely beneficial. Because it gives the mentees and the mentors a sense of, kind of a framework from which to work from. So you know you are not just going out I suppose really that you know that there is a support network behind you. So you are not just saying we are going to embark on a mentoring scheme, but what do we do? So it explains the whole process and the benefit of the scheme"* (ME4).

The training helps deal with unrealistic expectations. "*I feel it's really important because then you can get from them more what they want or don't want. And if their expectations, sometimes the expectations are totally unrealistic. And the actual training makes them think about it and where I found over the years where the mentoring partnerships may or may not have gone as well as they could have done I look back those were the people who didn't attend the training"* (MR1).

A HEI that invests in formal mentoring as an **organisation development tool** presents a culture that values the considerable contribution that senior staff can make to the development of more junior, less experienced staff. By supporting an initiative such as formal mentoring, respondents felt this sends a clear message regarding what the

institution stands for. *"So I do believe that if an organisation does invest in something like mentoring, it says this is what the organisation stands for*. … *Because for an organisation to be successful, it has to be working together no matter what and it has to have that kind of compassion underneath it for people and if that's evident then that's, it kind of seeps in to the whole culture, you know. So I do, I do think that mentoring genuinely is very important and not just, you know, a little, a little side show, if you like, I think it can make the difference in, in how organisations are successful or not"* (MR7).

As set out in Chapter 2, **relational mentoring** offers "a mutually beneficial relationship that meets members' needs while providing experiences of relational closeness, i.e., care, concern, responsiveness, vulnerability, emotional connection and commitment" (Ragins, 2016, p.17). This is evident in some of the responses received from mentors when asked why they volunteered to be mentors – they 'wanting to give something back'. "*So I wanted to help people, as I had been helped I guess"* (ME/MR1).

Mentors who had been mentees themselves found the experience to be invaluable so wanted to do the same for others. Some women wanted to support other women. *"I would consider that to have been very important to me and I think that women aren't as inclined to look for that support, so this mentoring scheme gave us an opportunity as more senior, because I was relatively junior at the time – I can't even remember – but the more senior ones of us who have been here a while to actually be able to pass back to the younger generation"* (ME/MR2).

Mentees wondered why busy senior staff would give of their time to mentor them. As one mentee said, "*It's still a big ask for them, you know, I don't know how much satisfaction they get and I have heard that particular person speaking and talking about what she has got from others from before she was my mentor. And in a public forum but like it's still a big ask for that, you know, and I know it's time intensive too"* (ME2).

Valuing mentoring by acknowledging the contribution senior staff are making to the organisation and to the career development of individuals ensures its effectiveness. "*I think it's important at an organisational level to demonstrate that mentoring is valued as an activity within the organisation in order to help people in their career"* (ME3). *"Anything that supports staff is good, you know, staff, people within the University because it's grown big time and a lot of people have floundered and for a case of an impartial ear may develop themselves a lot better"* (MR6). Whether mentors benefitted themselves from the experience is explored under outcomes (section 4.4.3).

In summary, my findings suggest that the dominant thinking is that a formal matching process is more effective than an informal process. *"So I think that...formal mentoring …allows that to happen, you know. You'd never have made those connections, if that wasn't there"* (ME/MR1).

4.4.2.3 Mentoring and knowledge

With a view to finding answers to my third sub-research question, *How does knowledge sharing and transfer take place within the mentoring process?*, I put a range of related questions (Table 3.17) to mentors and mentees on the type of knowledge exchanged in the relationship. Conversations on the type of environment that needs to exist to support the dynamic process of knowledge creation, management and transfer, particularly in relation to tacit knowledge within formal mentoring, as we understanding them, were also discussed.

As set out in tables 4.8, 4.11 and 4.12, there were over 180 references on knowledge and learning extracted from the transcripts using NVivo. However, when reviewing the type of knowledge interviewees referred to, only 16 specific references were made to explicit knowledge, as presented in Figure 4.3. All other references from both mentors and mentees, in almost equal measure, were on tacit knowledge or, as sometimes referred to, general knowledge. See Appendix 8 for sample verbatim responses to questions on mentoring and knowledge.

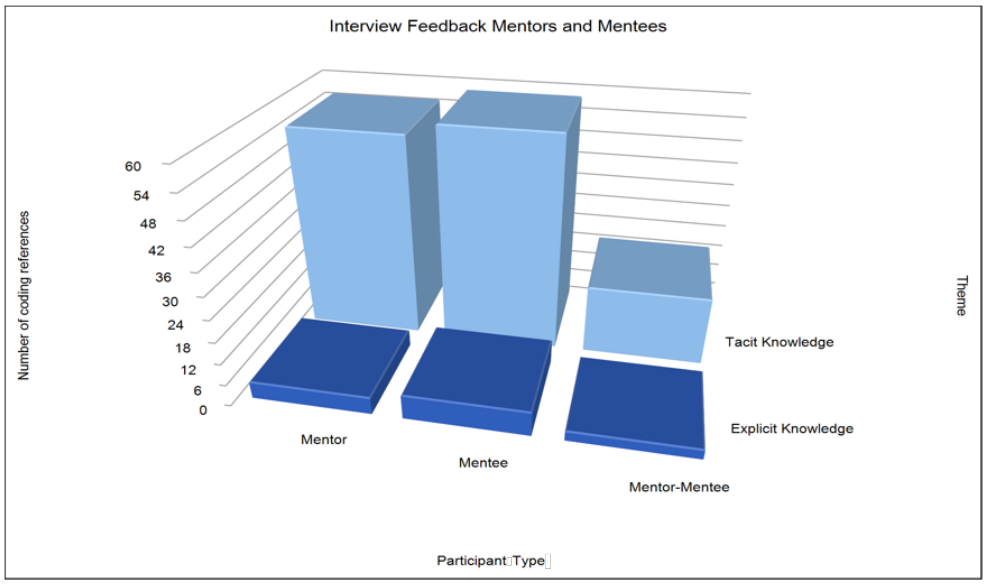

Figure 4.3 Interview feedback on knowledge

4.4.2.4 Explicit knowledge

As set out in Chapter 2, explicit knowledge is the formal and codified knowledge open to everyone via documents, processes and procedures (Nonaka and Takeuchi, 1995; Bryant, 2005). To establish the type of explicit knowledge shared within the mentoring relationship, I put the questions set out in Table 3.17 to the interviewees. The results are presented in the table below.

Table 4.11 Explicit knowledge: sub-themes

Sub-themes	Interviewees	References
	8	16
Grant assistance	2	3
Institutional knowledge – HR policies	4	4
Performance management	2	3
Practical explicit knowledge	2	2
Promotions guidance	3	3
Strategic knowledge	1	1

As can be seen from the table, the explicit knowledge references were limited, with mentors and mentees referring to the knowledge shared within their relationships more as tacit or general knowledge. From an analysis of the data, we see that most of the explicit knowledge shared related to specific guidance on the **institution** and on **HR policies** and procedures such as **promotions**, **performance management**, interview guidance and research support. It was surprising to find that mentoring encompassed far more exchange of tacit than explicit knowledge.

An example of such explicit knowledge was where a mentor gave a specific indication of what was required for a successful promotions application. *"One of the criteria that she identified as key for the promotions process was the need for ISI publications. I think one of the things was that she made me feel a little bit better about the whole concept of ISI publications. Because when she looked at my CV, she said okay well you only need one point five ISI publications every year, she said, so you know you are meeting that so for somebody to give me a target was an outcome that then I was able to work towards achieving. Whereas before that everybody just said well you just have to publish in ISI journals. You have to publish as much as you can, as many as you can. So for her to give me a figure, it meant that I was able to aim for that, it was a more concrete…"* (ME3).

Explicit knowledge about policies were exchanged but this was intertwined with the mentors' own personal knowledge and experience. The usefulness of the Performance and Development Review System as a support process to the knowledge and information exchange was raised a number of times. *"I mean, I suppose, as I said, it was the **knowledge of the institution**. She was able to back up a lot of what she was saying by other mind tools, other books, recommendations, that kind of thing, so again, it was actually teaching me how to understand the institution and then how to read around what I was trying to do, those two things"* (ME3).

Being **strategic** was another explicit focus mentioned. *"So that was one big thing. It was the idea of, again I suppose it's the thinking time, you know, actually thinking and again maybe being strategic in terms of how you approach things. Those key things were big learnings for me and I think out of that group, you know, how I approached this, she was very good at kind of questioning as well"* (ME10).

4.4.2.5 Tacit knowledge within mentoring

All knowledge derives originally from tacit knowledge (Nonaka and Takeuchi, 1995). As set out in Chapter 2, tacit knowledge is implied but not expressed verbally or in writing – it is transferred when sharing experiences. With reference to the questions put to interviewees in Table 3.17 to establish the type of knowledge exchanged within their mentoring relationships, Table 4.12 lists the key themes that emerged from the discussions around tacit knowledge.

Table 4.12 Tacit knowledge: sub-themes

Sub-themes	Sources	References
	23	133
Advice	9	16
Career advice	5	7
Difficult work relationships	5	7
Meaningful advice	4	5
Political advice	2	2
Practical advice – work-life balance	2	6
Career progression – promotion	6	9
Passion	1	2
Practical knowledge	5	8
Proactive	2	2
Relationship-building/networking	7	7
Shared experience – explore	4	4

Seeking advice within the mentoring relationship was high on the list. All types of advice were commented on – from practical advice on how to successfully combine work and home challenges, to advice on handling institutional politics, to accessing the more experienced mentors' tacit knowledge on "*how to play the game"*, etc.

Tacit knowledge is invaluable to a mentee starting out on their career. *"A personal kind of handbook in terms of setting goals. … What I like about her was she had a solid understanding of the institution and how to navigate it and I think that is probably the biggest thing I have learned from her was an acceptance and an understanding of this is the institution you work in and this is how it operates"* (ME10).

Political advice was cited as important tacit knowledge relating to 'what to do'. As one mentor remarked, "*A lot of it was about, you know, which committees do I need to sit on, where do I need to be, who do I need to be working with. … With the first person in particular, she was doing an awful lot of stuff that was very much student facing, which inevitably it is, but it was taking a huge amount of her time and she felt wasn't actually going to count for very much when it came to it … when it came to promotion*" (MR3).

As noted, there is significant explicit information available within the institution on the promotions process, but mentees wanted to hear first-hand from mentors who themselves had been successful in attaining promotion. In other words, the mentees

wanted to hear “what’s behind the explicit information” and looked to mentors to share tacit knowledge they had gained from personally maneuvering their way through the **promotions process**.

Learning about institutional and sectoral **politics** from their mentors was also of great value to mentees. *“I learnt a lot about, you know, how to play the game in terms of research and in terms of career progression. So that type of tacit knowledge is really what you are hoping for when you get involved in a mentoring scheme. Because everybody will tell you, you know what the specifics are in terms of the criteria for promotion or career progression. But it’s not until you actually speak to somebody who’s involved in playing the game that you get to know the specifics of how the game is actually played”* (ME3).

Practical advice on issues such as getting published and how to handle difficult work relationships was seen as being valuable – what to do and what not to do, what was important to **career progression** and what was less likely to be valued. *“Your time is valuable. So you know what counts and what doesn’t count. And trying to be honest with people about that. And saying, well you’re doing this, this and this but that doesn’t really count. Or that won’t help. And that’s the kind of thing that isn’t written down but you kind of need to say it to people. And it’s the kind of thing you don’t want to write down, or you don’t want anyone to say. But yea so I guess it is that kind of indirect knowledge in a sense”* (ME/MR1).

Mentors commented that it felt good to be in a position to share their tacit knowledge. “*It feels good … you realise the little bit of knowledge you have can actually help them”.* (ME/MR1). Assessing how the shared knowledge, particularly the tacit knowledge, became explicit knowledge for the mentees was difficult. However, those interviewed felt that the tacit knowledge they had received from their mentor had been so valuable that they were happy to share their new acquired knowledge with others by becoming a mentor. *“I had a mentor myself and I think that was very positive, a very positive experience, and I’ve worked both formally and informally with mentees and I think you just take people under your wings”* (ME/MR1).

4.4.2.6 Mentoring and learning

As set out in Chapter 2, mentoring is seen by some to be a unique one-on-one learning relationship where personal growth, learning and discovery can be experienced (Ragins, 2016) and can enable individuals to enhance their personal learning (Kram and Isabella, 1985). As set out in this chapter, mentoring can provide mentees with reflected power (Kanter, 1977) insights into organisational politics and access to information that is typically provided in the ‘old boys’ network’ (Ragins, 1989).

Section 4.4.2 sets out the experience of mentors and mentees on the knowledge shared within their mentoring relationships. Table 4.13 lists some of the key themes/words that were highlighted during the interview conversations on the learning

experienced by mentors and mentees in answer to SRQ3. See Appendix 9 for a sample of verbatim responses relating to mentoring and learning.

Table 4.13 Mentoring and learning: sub-themes

Sub-themes	Sources	References
	14	37
Mentees' learning	14	50
Be proactive	4	4
Career progression	2	4
Planning	3	4
Learning from others	6	12
Relationship issues	2	3
The value of feedback	2	2
Mentors' learning	8	14
Improved communications skills	1	1
Insight	2	2
Listening skills	3	4
Leading by example	2	2
Value of support	1	1

Mentees felt they learned that there was a need for them to be more **proactive** and **have a plan**. *"The key learning as a mentee would have been, I suppose, the value of an action plan and putting something on paper and going from the point of talking about what I'd love to do to putting the steps down and then putting an action plan together"* (ME12). What gets measured gets done.

A willingness to **learn from others** and to listen and be prepared to get the most from the mentoring relationship were key themes identified. *"You are in a new environment so a willingness to actually learn how a new environment works, you know. An interest in not just getting advice. Willing to ask questions and be prepared to take, you know, to listen to the answers"* (MR2).

For some mentees, the learning was quite substantial. *"Yes, I think the breakthrough moment came, it probably came in the first six weeks, two months of the process. I think the real breakthrough was, it wasn't what I was expecting, but it was the realisation that with starting point I was coming from at least the kind of academic, traditional academic career that I had envisaged going into the scheme was a vanishingly small possibility. … It was a bit of a blow"* (ME9).

Not only the mentees learned – mentors too experienced some reciprocal learning from the relationships. Some felt their **communications skills** and **organisation skills** were enhanced. *"I think it was a two-way learning process, certainly it was, okay, there is the transfer of information from me to the mentee. But I also learned. It certainly was a learning experience for me in that it helped my communication skills. It probably helped me in terms of getting more prepared for meetings because I knew when I was*

meeting this person you know next Tuesday morning or next Wednesday morning that I had to be prepared. I had to have you know whatever information they required or whatever help they needed. I'd have that prepared. So it definitely helped me from a professional perspective, it helped me be prepared for meetings. And helped me communicate with people and also gave me confidence as well in ensuring the information I had and the facts I had and the learning, my prior learning, you know, was correct and it was good and it was sound" (MR12).

The relationship provided another mentor with a very valuable **insight** into how younger academics think and what challenges they face. *"I suppose it was this idea of learning and keeping in touch with the things that the junior people feel are wrong. And even for me as a manager that has been very good to know"* (ME/MR2).

The research findings overall point to substantial knowledge sharing and learning experienced by mentees. As one mentee put it, *"So yeah, I kind of went in to it hoping to, to learn a few tricks and skills of the trade and I suppose along the way I actually ended up learning a lot more than I'd expected. … I felt going into it, it would be a good exercise, I felt coming out of it, it had been an invaluable exercise"* (ME9).

4.4.3 Mentoring outcomes

When reviewing the literature on mentoring outcomes, I was influenced by Kammeyer-Mueller and Judge's structural model of the relationship between mentoring and outcomes (2008). In particular, the model looks at intrinsic outcomes, such as career and job satisfaction, and extrinsic outcomes, such as promotions, career advancement and salary.

I ultised the model to formulate my questions to mentors and mentees to answer my fourth seb-research question – *What are the key outcomes of the mentoring process as experienced by both mentees and mentors?* What tangible and intangible outcomes, if any, were experienced by those involved in the formal mentoring scheme? The aim was to present a new lens on the outcomes experienced by mentors and mentees engaged in formal mentoring in a HEI and contribute to narrowing the gap in the research.

As set out in Table 4.14, questions on outcomes elicited significant responses from interview and focus group participants. See Appendix 10 for sample verbatim responses on mentoring outcomes.

Table 4.14 SRQ4 mentoring outcomes: sub-themes

Sub-themes	Sources	References
	30	228
Mentee outcomes	25	160
Mentor outcomes	14	47
Institution outcomes	10	13

Questions on whether or not involvement in the formal mentoring scheme had influenced careers in any way were put to both mentors and mentees. Mentors and mentees were also asked if they had experienced any extrinsic outcomes since or during their involvement in the mentoring scheme and if successful, whether they could attribute the success in any way to formal mentoring.

4.4.3.1 Mentee outcomes

Mentees commented on the intrinsic outcomes of the mentoring relationship in terms of greater levels of confidence and assertiveness; usefulness in terms of career planning; more awareness of other departments, structures and planning processes; the need for career planning and the management of the university. Awareness of institutional politics and learning the 'tricks of the trade' were identified by mentees as key intrinsic outcomes. Mentees gave examples of extrinsic outcomes: positive career moves they had made, such as applying for more senior posts; success with promotions; greater research output; and success with funding applications. Within Queen's University Belfast, a comparison between staff who had and had not been mentored "*showed a difference in the percentage who progressed subsequent to involvement in the scheme"* (MR1). Table 4.15 sets out the key outcomes experienced by mentees.

Table 4.15 Mentee outcomes: sub-themes

Sub-themes	Interviews	Responses
	25	160
Intrinsic outcomes		
Knowledge and learning	8	12
Increased confidence and assertiveness	9	22
Positive outcomes	7	14
Plan – focus	5	20
Career path support – career satisfaction	7	12
Relationships – friendships	6	10
Self-reflection – self-awareness	5	13
Negative outcomes	3	6
Networking and political awareness	7	10
Support – emotional/practical	5	5
Extrinsic outcomes		
Promotions success – research outputs	8	13

Mentee outcomes – intrinsic

As set out in section 4.3.2, The mentoring process, one of the key aspects of mentoring is the knowledge shared between mentor and mentee. The **knowledge** shared and the **learning** experienced by both mentees and mentors varied from tacit to explicit. "*Generally very positive, I think it's very good – those two things keep standing out for me, that one, it's the spotlight that you're putting on your career and what you need to develop and you're having somebody engage you on that and then the second one is*

just awareness and learning and hearing what's going on around" (ME7). *"I've mentioned already that I learnt a lot about how to play the game in terms of research and in terms of career progression"* (ME3).

One of the key intrinsic outcomes experienced by mentees was increased **confidence**. One mentee talked about how her mentor got her to look at her own personality and take **positive action** to change. *"I remember her having a discussion with me, a very open discussion about how unassuming gets you nowhere in universities. And that if I address anything I have to address that (laughs); she was very direct about that"* (ME1). This same mentee went on to run for an elected position, and she very much attributes having the confidence to do so to her mentor. *"I know when I met her again she was kind of laughing at how you could go from unassuming and quiet to running for politics…"* (ME1).

The predominant response from mentees was that the mentoring experience overall was a very **positive** one. *"She challenged but I found the whole experience so positive"* (ME2). "*It shifted where I was and brought me to a more positive place"* (ME1). "*So certainly it was a process that took me somewhere I wasn't expecting to end up but was a very, very useful process to do in terms of bringing my way of thinking around to several different perspectives on the same set of circumstances and the same point of my career that I found myself at*" (ME9). *"One thing I actually did say that I myself have found was that as a result of being involved in mentoring, I now reflect more on my own work and I am more **self-aware**"* (ME10).

Some intrinsic outcomes, such as being focused and having a clear career plan, were cited by some as resulting in extrinsic outcomes such as promotion. The establishment of new relationships and the benefit of being able to tap into someone else's knowledge and experience, increased confidence, improved interpersonal skills and increased **networking** opportunities were all outcomes experienced by mentees. *"So it made me more conscious about networking and getting outside of … as such"* (ME6). "*I always still look at ways to improve my networks, which was the original reason why I was entered into the mentoring thing"* (ME1).

The emotional and practical support provided to them by mentors was cited as being invaluable to mentees. *"I have met wise people who have directed me"* (ME7). Practical support with research outputs was also cited. *"It just took me down a path that has led to publications and research and all of that sort of thing. And I think it was from the mentoring"* (ME1).

The findings suggest that involvement in the formal mentoring programme provided mentees with time to **reflect** and **explore**. "*We are all busy managing work, families, further study, community involvement, and mentoring allows you to step off that treadmill for an hour or so and gives you space and time to reflect on work and also on different areas of your life"* (ME10).

Mentee outcomes – extrinsic

When I asked mentees if they had experienced any particular extrinsic outcomes, they cited success at promotions, securing research funding and publishing research as examples. Two focus group participants, one mentor and one mentee, said that the mentoring process had most definitely played a crucial role in at least one promotion and in securing one competitive funding bid. For others, the encouragement they received from their mentor gave them the confidence to go forward for promotion earlier than they had planned. *"My mentor was a real inspiration to me and gave me the encouragement that was generally lacking in my own school. Without this encouragement I would not have applied for a senior lectureship for perhaps another five years or so"* (ME1). "*It was successful in terms of me gathering information that I needed for my career progression, which was the focus of the entire relationship from a formal perspective"* (ME3*).*

Some mentees who went for promotion were not successful the first time around but felt that the experience of going forward provided them with very useful feedback for reapplying. *"Well I submitted for promotion, didn't go through that time, and the question was whether to appeal that decision or not and on what grounds and I felt very strongly about that mentor, you know, it's very unlikely that an appeal would change the outcome. I appealed anyway. It didn't change the outcome. However, I do feel that it prepared the ground for a successful promotion a year later*." (ME8). *"So on the whole I found it a really positive experience. … I would attribute her with giving me the push with regards to my PhD and down to real practicalities*" (ME2)*.*

Mentees reported experiencing success with **research outputs** as a direct result of a mentoring partnership. Cross-research collaborations were also cited as key extrinsic outcomes from the mentoring process. *"Assessing experience and so forth and then improving upon it so it is very much part of my work… We co-wrote the next article which was another performance assessment article. So I … tried to bring her in so that she could share the experience and now myself and herself and another head are working on another article"* (ME1).

"Well yeah, because in terms of targeting outlets for research work, that would be one of the things that I would have done. So I would always send journal papers to ISI journals because of the conversations that I had with her. And I would have applied for funding because of all the conversations I had with her, so I've been applying for funding for quite some time unsuccessfully and successfully but it's important to be applying. That was one of the things she taught me" (ME3).

Negative mentee outcomes

Unfortunately, the mentoring partnership did not work for one mentee, primarily because the partnership was set up outside of the formal mentoring scheme. It was instigated by the mentor, who appeared to have alternative motives in wishing to

include ‘acting as a mentor’ on his promotions application and because both he and the mentee were working within the same department. *“But ultimately, to be honest, our mentor/mentee relationship broke down. … So when that happened I would’ve lost trust and faith in my mentor, do you know, because of that”* (ME11).

The relationship did not work for another mentee because of her mentor’s position and how busy she was. “*It just kind of petered out because we were both very busy and the mentor was very, very busy”* (ME5).

For another mentee, the personalities just did not work. “*The mentor has to have boundaries around how often they need to be contacted by the mentee as well. So in some cases, a mentor/mentee relationship will develop so I would have liked if a relationship had developed between us but it didn’t. But that’s down to personalities and there’s nothing that a system can put in place, that’s not something that the system can address”* (ME3).

4.4.3.2 Mentor outcomes

All mentors interviewed rated their involvement in the formal mentoring programme as a positive experience. Benefits cited included increased networking opportunities, improved communication skills, ‘honed’ management skills, increased confidence and a re-evaluation of their own career paths. Some mentors reported developing new friendships as a direct result of their formal mentoring partnerships. Being **valued professionally** gave some mentors a deep sense of **satisfaction** from their involvement in the scheme.

Acting as a mentor provided the opportunity for some to expand their knowledge of the institution and gave them a broader perspective of processes within different faculties and departments, which gave rise to cross-disciplinary **research collaborations**. Two mentors cited that being involved in the mentoring scheme helped them to be **promoted**.

Table 4.16 sets out the key positive outcomes experienced by the mentors. Appendix 10 provides a sample of verbatim responses on mentor outcomes.

Table 4.16 Mentor outcomes: sub-themes

Sub-themes	Sources	References
Intrinsic		
Career enhancement – self-reflection	2	2
Improved confidence, communications and management skills	2	4
Knowledge and learning	6	11
Networking – new relationships/friendships	8	17
Personal satisfaction – being valued professionally	10	17
Extrinsic		
Promotions	4	5
Research outputs – collaborations	3	5

Mentor outcomes – intrinsic

Intrinsic outcomes such as personal satisfaction, time for self-reflection, improved communication and management skills and the opportunity to expand individual networks were all experienced by mentors. Being 'pro-social' and giving something back was important to most mentors. "*I think in the context of the mentoring work that I've done, it would be more personal satisfaction rather than anything else. But I think it also in terms of career enhancement and development, one's own career enhancement and development, in a very practical way it does help tick a box in the context of if you're going for promotion, for example, because it shows leadership"* (MR5).

Involvement in the formal mentoring scheme provided some mentors with the opportunity for self-reflection. *"It helped me **communicate** with people and also gave me confidence as well in ensuring the information I had and the facts I had and the learning, my prior learning, was correct and it was good and it was sound"* (MR12).

While the mentees experienced **substantial knowledge transfer** and learning from the mentors, the mentors too felt they had learned a lot. *"I think it was a two-way **learning process**, certainly it was, and okay there is the transfer of information from me to the mentee. But I also learnt, it certainly was a learning experience for me in that it helped my communication skills"* (MR12)*. "I probably gained knowledge in areas that weren't that familiar to me beforehand"* (MR4)*.*

Sharing **knowledge** was a positive experience for mentors. As one mentor put it, *"It feels good. Its ego based. You know, when you're sitting looking at someone, you realise the little bit of knowledge you have can actually help them. And it saves them, the knowledge that I picked up over three or four years, I can give to them. Over a period of a year, maybe even three months, great. You know, it feels good to actually share that and know that you're saving somebody else trying to figure it all out the hard way"* (MR9).

"Well you understand more about the university. Because you really get into the nitty gritty of a person's situation. The contacts and the politics within departments. The culture of different units, to see how they work. So you do get to see, well actually, this is how the other half lives. And maybe we're not so bad after all, or actually you know what, we could copy some of the things that they're doing in that department and bring them here. So that kind of fertilisation was great" (MR9).

One mentor found the transfer of **personal learning** from his mentoring experience to be extremely useful. For another, **time for reflection** was key. *"What are my priorities? They are not necessarily about promotion, they maybe about the job, the work. The development that I am doing as a person. Then you start to look at where you are going, what you are doing. Because it is very hard to say to somebody and certainly, this isn't the relationship. However, it would be very hard to say to somebody, you need to do this. When in actual fact, you're not doing any of it yourself"* (MR9).

The **transfer of learning** was also experienced positively. *"I know at the moment I'm doing an MBA here … and some of the group work we do is in groups where you have to act as a business leader within your group or as a team leader. And certainly from my experience as a mentor, I brought that into the exercises or into the group discussions and group exercises and that has helped"* (MR12).

Mentoring provides a platform for **building relationships** across the institution that otherwise may not exist. "*So you actually have to work very much on building relationships. So now it has become quite important to me to know people right across the institution. That may not be the case for everybody, you know, but no, there are huge advantages I think, it's always going to have a positive effect, I think, for both parties, unless it goes very wrong"* (MR3).

Challenging personal assumptions and getting to know what is going on in the institution were other positives cited. *"I think that it can be a wakeup call. You know because it challenges sometimes your own assumptions. I think it did help in that respect for me to understand on the ground what was going on, on a day-to-day basis. And at least in one case I think I didn't, to be honest I didn't get an awful lot other than that out of it, other than a sense of personal satisfaction"* (MR5).

Improved management skills was another valuable outcome cited. "*So there's the social side of the job, there's the being a better manager, which I think I have become because of mentoring. A lot of my research students are women you know, so they see me as somebody who is a mentor in general and I think that is very important."* (ME/MR2).

<u>Mentor outcomes – extrinsic</u>

One mentor at a very senior level cited that heeding her own advice and seeking and listening to the advice of others helped her go forward for promotion. Furthermore,

being able to document that she had acted as a mentor strengthened her application. *"So I think the more open you can be to that sort of thing, to giving and getting advice in an institution like this, the better your experience will be. The worst thing you can do is sit in your office, take no advice, and think you know everything. You won't get anywhere you know, you really won't. You know it's all about that… it has definitely helped me. And when I went for the chair, you know, one of the criteria was mentoring experience. And then I wrote on it, actually I've done quite a lot"* (ME/MR1).

"Both my mentees were promoted to senior posts and on both occasions they had not received encouragement and support within their own schools. The scheme opened doors that would otherwise have been closed to them and I am delighted to have been able to contribute to that" (MR1).

For some, the mentoring relationships produced some excellent **research collaborations** that resulted in successful funding bids and publications. "*If I look at, for example, the EU project, well the EU project would have been an example of where we actually got moving"* (ME/MR2).

"Yes it's very tangible, or we've submitted it, we don't know whether we'll get it but we've submitted and there is the possibility of a couple of papers coming out of that. So that would be tangible, absolutely tangible" (ME/MR2).

"Which gives you broader insights and different insights and it just gets you to know different people and it leads to other opportunities. It also leads to opportunities for some nice cross-disciplinary research and things like that, which is wonderful. I was working with some people from Psychology, so obviously there are, again, very close alignments, and it did lead to some nice little projects that we got involved in" (MR3).

4.4.3.3 Institutional outcomes

Finally, when analysing the data, I identified a number of institutional outcomes.

Table 4.17 Institutional outcomes: sub-themes

Sub-themes	Sources	References
	10	15
A mentoring ethos	7	9
Commitment and support	3	5
Institutional knowledge	2	2
Investment	1	1
Research funding and publications	3	3

Some of the participants believed that having a mentoring ethos within the institution communicates a message to mentors that their experience and knowledge is valued by the institution. Acknowledging the formal mentoring process as a method of transferring **institutional knowledge** to less experienced employees sends a very clear message.

"Definitely. … I have learned a lot from it. And I think it's something that's, in my experience, … valued by the institution actually. The fact that you can mentor younger, encourage younger faculty and that sort of thing. I think it is valued" (ME/MR1).

One mentor was of the view that mentoring helps reduce the type of individualism that is rampant in HEIs. "*I genuinely do believe that if an organisation does back this mentoring, it has a lot of benefits that will stop this sort of 'mé féin', you know, this kind of, you know, I have to paddle my own canoe and it isn't, I don't look left or right and I don't care. … So I believe that if an organisation does invest in something like mentoring, it says this is what the organisation stands for and it doesn't stand for this sort of cutthroat, you know*" (MR7).

Having a **mentoring ethos** in an institution, i.e., where mentoring is seen as integral to the development of staff, sends out a clear message that there is a **supportive culture** in place and contributes to the success of the institution as a whole. As one mentor put it, "*for an organisation to be successful, it has to be working together no matter what and it has to have that kind of compassion underneath it for people and if that's evident then it seeps in to the whole* ***culture****, you know. So I do, I do think that mentoring genuinely is very important and not just, you know, a little side show, if you like. I think it can make the difference in how organisations are successful or not" (*MR7).

As the institution grows in size, a formal mentoring scheme provides new employees with a key contact who has volunteered to provide support and guidance. "*Well I think that's getting worse because the university is growing of course all the time. You don't see people at all anymore, even with my own colleagues, my head of section; it's extremely difficult to set up meetings. For people who come in new, it must be so much harder and I think to have a formal relationship like the mentor/mentee is then a very good one because at least you have one person you know and you meet on a regular basis without any pressure being associated with it"* (MR4)*.*

A formal mentoring ethos also shows the institution's **commitment** to supporting employee development. "*I think a lot of the mentees that I would have been aware of at least and I don't know how, this is overall, would be post docs or would be people that weren't appointed to a kind of a tenure track position at a junior level and who probably could benefit the most. I'm not side tracking the post docs or whatever. But you know the university has made a formal commitment to these people and vice versa. They could have a career in the university for up to 40 years, you know. They're at the very beginning of that career and yet only a small proportion of them, it would appear to me, actually engage with the process"* (MR5).

Mentoring provides support to staff in a very cost-effective manner. *"Anything that supports staff is good, you know, staff, people within the university, because it's grown big time and a lot of people have floundered and for a case of an impartial ear may develop themselves a lot better"* (MR6).

Mentoring provides access to **networks** to which mentees would otherwise not have access. The institution benefits from this because through these networks, connections are made and **collaborations** are instigated, which can result in more **funding** for and more **publications** by the institution. *"I mean it does facilitate the development of networks, there's no question about it. And I think that is a real important soft consequence of the mentoring thing. The establishment of a wider network, through the process, which actually then yields* ***social capital*** *for everybody in the organisation"* (MR11).

4.5 Summary

The findings presented in this chapter identify a number of key sub-themes to address the four sub-research questions under the headings of context, process and outcomes. The interviewees were most engaged when discussing the mentoring process, the matching process and mentoring and knowledge (30 interview sources – 180+ references). Interestingly, the feedback in relation to the transfer of explicit and tacit knowledge differed quite significantly; while only 16 specific references were received on explicit knowledge, over 133 were received on the tacit knowledge shared within the mentoring relationship. The sharing by mentors of tacit knowledge with their mentees was seen to be a core aspect of the mentoring process; it helps mentees to understand institutional politics and learn how to 'play the game'.

Mentoring fosters a tacit-enabling culture between co-workers. In HE, such a culture gives rise to the creation of new knowledge when valuable knowledge is passed on by senior academic or professional staff to less experienced members of the institution.

My research found that learning from the mentoring relationship is not restricted to the mentee; mentors also learn to a significant degree. The findings also show that the culture fostered by formal mentoring contributes to the success of the institution as a whole. By promoting a culture that enables a wealth of knowledge and experience to be passed on to junior, less experienced staff and by valuing employees' involvement in mentoring, the institution ultimately reaps the rewards. Being valued professionally was a key motivator for mentors.

While very supportive of the matching process, choice for mentees within the mentoring context was seen as being important. The findings yield these key outcomes of the mentoring relationship: understanding the importance of trust and, crucially, how trust can be established; the need for openness on both sides; the sharing of personal information; the sharing of failures as well as successes; and how to build resilience.

The interview findings reveal some differences between genders in relation to the importance of the gender of the mentor. Differences were also apparent in areas where women tend to seek support from their mentor, such as emotional support, work–life balance and promotions. However, it would appear that, contrary to the literature, women wish to work with the 'best mentor' rather than the 'best female mentor'.

Lack of self-belief was an area identified as particularly pertinent to female mentees. As presented in other studies (Bhopal and Brown, 2016), women did appear to think that they needed to be exceptional to succeed. *"The really impressive women didn't seem to have any sense of their own ability"* (MR11).

The findings contribute to the research by presenting a new, knowledge-based perspective of formal mentoring in the HE sector. This contribution is further discussed in Chapter 5.

Chapter 5 – Discussion

5.1 Introduction

The purpose of this chapter is to reflect on the overall outcomes of my research in terms of whether the findings have informed or contributed to the existing literature on the function of information and knowledge sharing in mentoring relationships within the HE sector. This chapter will further seek to set out if the findings, as presented, have answered the four sub-research questions that address the central research aim of presenting a new, knowledge-based perspective of formal mentoring in the HE sector.

As set out in Chapter 2, there are many definitions of mentoring: a reciprocal and collaborative learning relationship; a mutually beneficial interaction between mentor and mentee; a relationship that supports personal growth, learning and discovery; and a form of learning linked to career success, leadership development and increased productivity.

My definition of mentoring is that it is "a mutually beneficial relationship where an experienced employee openly shares their work and life experiences with a less experienced colleague within the confines of a confidential relationship. It is a mechanism that openly permits and encourages both parties to draw on the more experienced employee's wealth of knowledge, which otherwise would be lost not only to individuals but to the organisation as a whole" (the author). The research has shown that engaging in effective mentoring relationships can be very useful for an individual's personal and professional development (Kram and Isabella, 1985; Higgins and Kram, 2001; Rock and Garavan, 2011; Ragins, 2016). However, despite this, there has been little empirical work on the impact of mentoring relationships on knowledge creation and sharing, particularly tacit knowledge sharing, within the HE sector. To address this, the core aim of my research was to present a new, knowledge-based perspective of formal staff mentoring in HE.

5.2 Thematic analysis of mentoring

Figure 5.1 presents a thematic analysis (TA) view of the research findings through a knowledge-based lens. Table 1 presents a summary of the answers to the four sub-research questions. Subsequent sections of this chapter set out what is of particular importance.

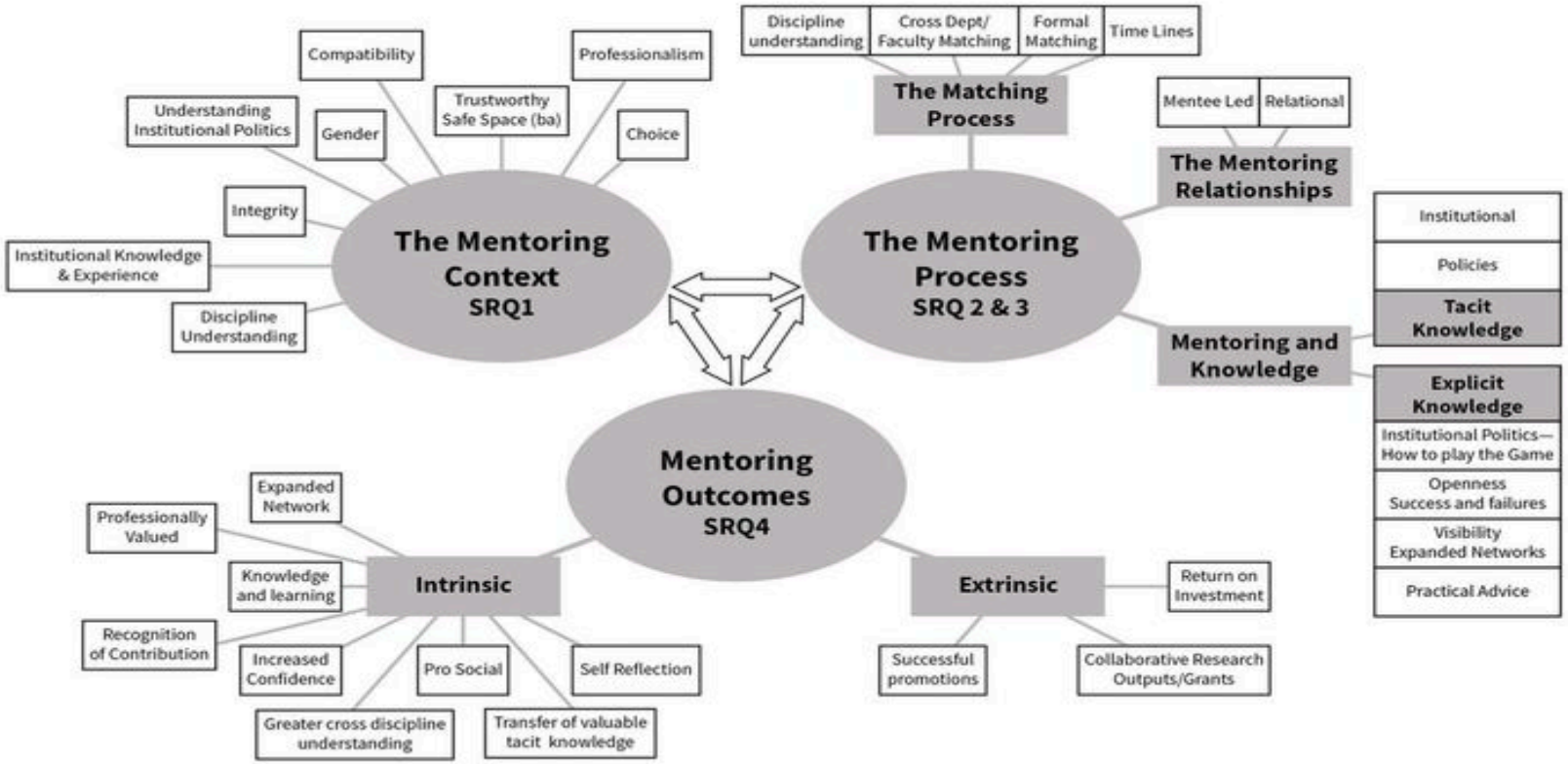

Figure 5.1 A thematic analysis of mentoring from a knowledge-based perspective (the author)

Table 5.1 Summary of the thematic answers to the research questions

Research questions	Themes	Sub-themes from the research	Mentoring from a knowledge-based perspective – key themes from the research
What are the contextual factors that influence the mentoring process from the perspectives of the mentee and mentor within a HE context? (SRQ1)	Mentoring and trust	Boundaries Building rapport Choice Compatibility Confidentiality Openness Formal Ground rules	Choice Compatibility Openness Integrity Availability of role models All lead to a trustworthy 'shared 'safe' space ('ba') that serves as a basis for knowledge sharing.
	Mentoring and gender	Ambition Culture Emotional support Gender neutral Isolation Role models Work–life balance	
	Mentoring attributes	Active listening Advice Coaching Communications skills Confidence Development empathy Guidance integrity Knowledge and experience Institutional knowledge Openness Politics Power dynamic	Institutional knowledge and experience Understanding Institutional politics 'How to play the game' Discipline

		Professionalism Reflectiveness Resilience Self-belief	
What is the nature of the matching process? (SRQ2)	Formal/ informal	Choice Cross-faculty matching Discipline understanding Formal agreement Mentor experience Mentoring duration Respect Timelines	Formal matching Cross-department matching Discipline knowledge Choice Formal agreement Specific timelines
	The mentoring relationship	A structured approach Cross-faculty access Formal and informal Institutional knowledge Mentoring commitment Mentee-led Mentoring training Motivation to mentor Organisation development tool Recognition Relational	Mentor experience Personal stories Mentee-led core to engagement Formal mentoring training Relational
How does knowledge sharing and transfer take place within the mentoring process? (SRQ3)	Explicit knowledge	Grants assistance; Strategic knowledge; HR policies Promotions	Institutional policies Research grants Promotions
	Tacit knowledge	Institutional politics Difficult relationships Practical advice – work–life balance Promotions advice Networking Planning	Mutual learning New knowledge – institutional politics How to ‘play the game’ Promotions process Work–life balance Shared experiences

		Goal-setting Shared experience	Openness – success and failures Managing difficult relationships Shared safe place, 'ba' Expanded networks Visibility Research collaborations Goal-setting
What are the key outcomes of the mentoring process as experienced by both mentees and mentors? (SRQ4)	Mentee outcomes – intrinsic	Assertiveness Career plan Career enhancement – satisfaction Expanded networks Knowledge and learning Increased confidence New relationships Self-reflection Self-awareness Emotional support Practical support	New knowledge Mutual learning; Expanded networks Collaborative research projects Greater cross-discipline understanding Promotions Encouragement and support
	Mentee outcomes – extrinsic	Promotions success Research grant success	Successful research grants Promotions success
	Mentor outcomes – intrinsic	Career enhancement Improved communications management and organisation skills Personal satisfaction	Professionally valued Self-satisfaction; pro-social Knowledge of the key issues for the institution Transfer of learning
	Mentor outcomes – extrinsic	Successful promotions Successful research grant	Recognition of contribution
	Institution outcomes	Valuable knowledge Mentoring ethos	Valuable knowledge captured ROI

5.3 Conceptual themes

In an attempt to provide new insights, my findings will now be summarised under the three key themes within my conceptual model:

1. The mentoring context: the knowledge place, the 'ba', the space where the mentoring takes place
2. The mentoring process: the matching process, the knowledge conversion process, i.e., the SECI model, the knowledge sharing, transfer and conversion process within the mentoring relationship
3. The mentoring outcomes: the growth and shift in knowledge experienced through the conversion process, assessing what key intrinsic and extrinsic outcomes, if any, were experienced by those involved in the mentoring partnerships

5.4 The mentoring context

Chapter 2 established that 'ba' is that shared space that serves as a foundation for knowledge creation and emerging relationships (Nonaka and Takeuchi, 1995; Lincoln and Guba, 2000). Within mentoring, the 'ba' it is that tacit-enabling, safe space where mentors and mentees can exchange insights and knowledge. Many factors influence the mentoring process from the perspective of the mentor and mentee within a HE context. One key factor is the establishment of trust – mutual trust, because the mentor is sharing very personal information with the mentee.

The findings highlight that in order to establish this trust, there must be an element of choice for mentees in terms of who their mentor will be. Affording the mentee the opportunity to accept or decline their matched mentor ensures that the 'ba' for openness and compatibility is established in a confidential, trustworthy environment. Some respondents expressed a fear that exposing their weaknesses to people in power "*might be damaging ... in the long term"*. To establish trust, there must be a willingness on both sides to be vulnerable by being open, making personal disclosures and sharing fears, personal beliefs, struggles and aspirations. The greater the risk, the greater the opportunity to build that essential trust for the mentoring relationship to be effective (Kram and Isabella, 1985; Dutton and Ragins, 2007; Ragins and Verbos, 2007; Ragins, 2016).

A unique aspect of mentoring from a knowledge-based perspective is the requirement to set boundaries by agreeing 'ground rules' through the use of a formal agreement. The HE sector is quite formal, and the findings of my research found out that by using a formal agreement, boundaries were set from the outset and goals were agreed for the mentoring relationship.

The under-representation of women at the most senior levels in HE is an intractable problem globally. Within the Irish HE sector, only 21% of full professorial positions are

held by women. A ‘macho misogynistic’ culture with residual sexist attitudes is evident across the sector: among the 4,835 respondents to a national gender equality survey, 64% of females and 38% of males believed that there was gender inequality in the Irish HE sector (HEA 2016).

This frustration is obvious in the research findings: women believe they must be exceptional to advance. The research has established that the gender of the mentor is a key consideration when ensuring that the mentoring exchange happens in an open, confidential, shared space. Female mentees actively sought a female mentor (sections 4.3.1.1 and 4.4.1.2) for a variety of reasons, not least that they felt women were better placed to advise them if they had been through a similar journey themselves. Women were more likely to understand the challenges facing mentees in the early stages of their careers in relation to institutional politics, balancing work and caring responsibilities, managing research outputs and successfully navigating the promotions process. One woman felt that men “just don’t get it”.

My own experience in this regard supports the thinking and the research that women are much more likely to be open in a single-gender environment when discussing such personal issues. Interestingly, while the research sets out that women have difficulty accessing mentors (Angelique et al., 2002; Pololi and Knight, 2005; Sambunjak et al., 2006; Groysberg, 2008; Darwin and Palmer, 2009), this did not appear to pose a problem in the case study institution. However, female participants in my study did see the value of mentoring in supporting their career progression and providing them with access to important information shared by the dominant group.

Another interesting finding from the study is that female mentors provided female mentees with emotional support and tried to help them overcome their lack of self-belief. There was a strong sense of wanting to provide social supports to female mentees; in particular, some female mentors felt strongly that they had a duty to support younger, less experienced female academic colleagues. However, it should be noted that a counter argument was presented by some participants, who claimed that having access to the best mentor possible, irrespective of gender, could provide them with career insights and help them expand their social networks.

I feel strongly that for too long, women have been talking to women about inequality without any significant results. I fervently believe that to drive the much needed changes in the sector, we need to engage men in the conversation (Gibson, 2006; Schuller, 2017). By enabling a one-to-one, confidential relationship, mentoring is one such context where this can be achieved.

To be an effective mentor, attributes such as professionalism, integrity, empathy, knowledge of the institution, the ability to be reflective and self-awareness were all factors that influenced the mentoring process. Interestingly, openness was of particular importance to mentees: openness about successes as well as failures, *“somebody*

who's been around the block a bit", and the learning that occurred from that experience was of particular interest. Resilience and coping skills – learning how not to take things personally – were key skills that mentees felt mentoring could help them develop.

In summary, both the literature and my study found that the key contextual factor that influences the mentoring process from the perspective of the mentor and mentee in a HE context is the establishment of trust from the outset. While the need to establish trust within mentoring is not unique to the HE sector, it appears to be of particular importance within the sector. In my opinion, this could be due to the nature of roles within HE – one is likely to encounter their mentor in many different situations, such as on interview or promotions boards, on academic or management committees and, perhaps, as one's head of department due to the rotating nature of that. My study found that institutional knowledge and experience and an understanding of institutional politics were all key attributes very pertinent to the HE sector. Openness, integrity and access to role models all contribute to creating a trustworthy shared safe space ('ba') that serves as a basis for knowledge sharing.

5.5 The mentoring process

Mentoring is about sharing and creating knowledge (Bryant, 2005). The mentoring process provides opportunities to share and transfer existing knowledge, specifically institutional tacit knowledge. As set out earlier, mentoring provides a one-on-one relationship where personal growth and learning can take place. This can happen only when trust has been established, and a key element of establishing trust is the matching process.

5.5.1 The matching process

In answer to the SRQ2, *What is the nature of the matching process?*, my research found that providing the mentee with an element of choice in terms of who their mentor will be leads to a more effective relationship by ensuring compatibility and providing that trusted space for the transfer of knowledge. As the research shows, by forcing the matching of pairs (Merriam, 1983), the need for compatibility – a key characteristic of mentoring – is ignored.

While the formal matching of mentors and mentees from different departments was strongly supported in my study, there was some hesitancy around cross-faculty matching. Some interviewees felt it made little difference while others felt there needed to be a mutual understanding of the discipline for the matching to work. The formal matching process was seen to provide mentees with mentors they would otherwise not have had access to and was cited as a key reason for the success of the partnership. "*You need someone outside of your own part of the organisation so you can see the bigger picture"* (ME3). This is possibly unique to the sector because understanding how knowledge-based institutions work is key to progression within the institution.

Mentor experience was seen by participants to be an essential element of the matching process. Mentors who had successfully navigated the promotions process while combining work and family responsibilities were of major value to female mentees – the mentees wished to learn how those mentors had done that successfully.

The findings also show that mentoring has moved from a traditional to a more relational, or mutually beneficial, relationship. The outcomes discussed later in this chapter will provide evidence of mutual benefits felt by both mentors and mentees.

Possibly unique to the HE sector, a mentee-led mentoring scheme ensures that mentees take responsibility for making the most of the mentoring relationship and valuing the time their mentor has volunteered to give to them. Mentors cite numerous reasons for being pro-social and offering freely of their time in a mentoring relationship. The predominant motive sighted is to give something back and share some of their institutional and life-experience knowledge. Having a clear timeline for the mentoring relationship (12 months in the case study institution) was supported and cited as contributing to the success of the relationship.

As seen in Chapter 2, a good mentoring programme requires effort to get it established and to ensure that participants are well matched, know what their role is and are properly supported through the programme' (Gardiner et al., 2007). Allocating resources to ensure the formal scheme is managed effectively should be a priority for HEIs.

Some mentors felt that seeking formal recognition for mentoring through mechanisms such as the promotions process or the workload model would give rise to a greater supply of mentors. However, I would caution that formally recognising a mentor's contribution within the promotions process might ultimately damage the pro-social nature of the voluntary essence of the scheme and become a promotions portfolio 'tick box' exercise. I do, however, feel that work should be done to establish whether or not more senior academic staff members would make themselves available to mentor if mentoring were to formally recognised.

5.5.2 Mentoring and knowledge

The key aim of my research was to present a new, knowledge-based perspective of formal mentoring within the HE sector. My research sought to look at the connection between the tacit dimension of knowledge and the creation of new knowledge within the mentoring relationship to answer the third sub-research question, *How does knowledge sharing and transfer take place within the mentoring process?*

The research respondents were particularly engaged in this topic. From the evidence presented, it appears that limited explicit knowledge is shared between the mentoring partners. By explicit knowledge, we mean articulated codified knowledge found in books, on the web and other visual and oral means (Polanyi, 1966; Nonaka and

Takeuchi, 1995). With today's modern technology, all this information is readily available in a HEI on the institution's website and through HR-led information sessions, induction training and relevant offices. All processes are clearly defined and the procedures to be followed are highlighted. The technical know-how, *per se*, is openly available.

However, it would appear that this is not the type of information that mentees seek or, indeed, need. Mentees want the information behind the explicit information. They want insight into workplace politics and access to information that is typically not easily accessible to them. They want to learn the 'tricks of the trade' and want access to their mentors' tacit knowledge through the spoken word (Polanyi, 1966).

The tacit exchange of knowledge within the research participants' mentoring relationships ranged from gaining mentor knowledge and insight into institutional politics; to short-circuiting the promotions process – i.e. the 'real' advice that will get them over the bar and secure that promotion; to practical career advice, work–life balance, expanded social networks and exposure to contacts that would not have happened if they had not been involved in the mentoring relationship. Assessing senior members of staff would have been impossible for most mentees.

The findings presented are evidence that mentoring provides that confidential and trusting space for turning shared tacit knowledge into new knowledge. "*You know there is nothing like talking to someone to gain life experience, … sharing their knowledge can be very beneficial to apply it in your own context"* (ME4).

The mentoring relationship helped one mentee to reconnect with her own core values and passion and make informed decisions about what she really wanted to do. Another mentee came to realise that the career he had originally hoped for was not within his grasp; his subsequent change of direction led to a life- and career-changing experience for him.

One mentee defined learning as how to play the game and win. "*People from a separate department have a different perspective on the topic and its very important that you learn the importance of looking at a problem holistically … from all perspectives"* (ME4).

Self-efficacy theory states that willingness to share is very much intertwined with one's own personal attitude and organisation commitment (Swart et al., 2014). The findings present many reasons why mentors were motivated to share their knowledge with mentees, such as wanting to give something back and wanting to offer help and support to less experienced, more junior members of staff.

The findings present evidence that mentoring creates the 'ba', the space for this knowledge exchange to take place when the context is right, when trust is established

and when both sides are committed to the relationship. Without doubt, mentoring is a knowledge-enabling space.

5.6 Mentoring outcomes

In answer to the fourth sub-research question, *What are the key outcomes of the mentoring process as experienced by both mentees and mentors?*, the research findings point to a range of intrinsic outcomes. Intrinsic outcomes such as enhanced knowledge, learning and support with individual career plans resulted from involvement in the formal mentoring scheme. It was found that the verbal, face-to-face sharing of tacit knowledge by mentors on how to successfully navigate the promotions process was of great value to the mentees, who would not otherwise have had access to such information.

The 'ba' created through the formal mentoring scheme provided both mentors and mentees with the time and space to be more self-aware and reflective and enabled mentors, in particular, to hone their reflective skills. Emotional and practical support, new friendships and increased self-awareness were all intrinsic outcomes experienced by mentees and mentors alike.

The literature claims that the tacit exchange of knowledge within a formal mentoring relationship is essential to the success of the relationship. This is evidenced from the large number of references (133) from interviewees to SRQ3.

Alongside the willingness of mentors to volunteer as mentors, my study found that within the knowledge-enabling space, some reciprocal learning was experienced by mentors, such as enhanced management skills, improved communication and planning skills, extended networks, cross-disciplinary research grants and, most importantly, valuable insights into the challenges younger academics were experiencing. Mentors also cited a transfer of learning to other elements of their work. Being valued professionally gave some mentors a deep sense of satisfaction.

In relation to the extrinsic outcomes experienced by mentees and mentors, there is some evidence of mentees being promoted and securing collaborative research grants. For example, four of the 12 mentees interviewed confirmed they had been promoted. However, while it is unclear from their responses whether they attribute their promotion directly to the mentoring scheme, they are firmly of the opinion that involvement in the scheme gave them the confidence to go forward for promotion, in some cases earlier than they would have done had they not participated in the scheme.

Mentoring gave both mentors and mentees time and space for reflection.

One mentee claimed that the tacit information she received from her mentor definitely changed her focus and helped her to make a successful application for promotion. In addition, mentors provided evidence that some of their mentees had been promoted.

However, this is not extensive. Further research in this respect is certainly needed and is something my own research will focus on in the future.

When undertaking this research journey, it became clear to me that the value to the institution of senior managers making themselves available to mentor less experienced employees is immeasurable, not only in cost but in the wealth of knowledge they possess. While the difference in levels between mentors can, at times, be slight, the difference in knowledge and experience can be immense.

Within my conceptual model of mentoring (Figure 2.1), the findings highlight that once (i) trust is established, (ii) gender in the matching process is considered and (iii) key mentoring attributes are possessed by mentors, a knowledge-enabling safe space ('ba') will be created where knowledge can be exchanged and converted to new knowledge.

Chapter 6 – Conclusions

6.1 Summary of research findings

In this chapter, I relate the original aims and objectives of the research to the outcomes and summarise the key findings to each of the four sub-research questions. I set out the contributions the study has made to the knowledge and to professional practice. I also examine the limitations of the research and the agenda for future research. I end the chapter with a reflection of my personal journey.

The objective of my research was to present a new, knowledge-based perspective of formal staff mentoring in HE and in so doing contribute to narrowing the identified gaps in the literature. Through the development of a conceptual model of mentoring from a knowledge-based perspective (Figure 6.1), based on Nonaka and Takeuchi's (1995) theoretical SECI process, my research concludes that formal mentoring provides a safe socialisation space – a 'ba' – for the spiral of knowledge creation and transfer to flourish

SRQ1 – *What are the contextual factors that influence the mentoring process from the perspectives of the mentee and mentor within a HE context?*

In response to the question posed by SRQ1 – the context, the research authenticates that establishing trust from the outset is key to providing a safe context where fears and aspirations can be discussed. As set out in Figure 5.1, mutual trust, compatibility and an element of choice in the mentor are all essential elements to this. Institutional knowledge and experience, discipline understanding and professionalism were also deemed to be core to the success of the mentoring relationship in the HE sector.

Gender was established as a key factor that needs to be considered within formal mentoring in the HE sector. While we all want to believe that the workplace is a meritocracy where people are judged for the calibre of their work, the research shows that this is not the case. Visibility plays a key role in an individual's success, and this provides challenges for women of a certain age (e.g., those with young children) who are trying to balance work and home-care responsibilities. As set out in the literature, while women represent 51% of the population and have superior educational qualifications, they are still missing from senior decision-making roles (17% of CEO positions are held by women in Ireland) and from political life (22% of women are elected to parliament in Ireland). Changing this will not be robbing 'Peter to pay Paula' but a step towards both greater equity and more efficiency (Schuller 2017).

Women's lack of self-belief in their own capabilities was also a worrying finding: women are much slower to put themselves forward for promotion but when they do go forward, their rate of success is on a par, if not better, than their male colleagues.

I am a strong advocate that senior women in academia must not be content with merely mentoring others or 'passing the torch' but must also use their positions to influence institutions, to speak out, until the "academic structures fit women as well as men and until women's issues truly become people's issues" (Gerdes, 2003, p. 269). The research established that women need to be strategic in the roles they take on, separating the invisible roles from the visible ones.

HR has a role to play in formalising mentoring for women academics, in particular, as a means to fostering the necessary change in academic institutions. In doing so, however, it is crucial to engage men in the conversation; one such way of doing this is through mentoring.

SRQ2 – What is the nature of the matching process?

Answering the question posed by SRQ2, the findings set out that the formal matching of pairs was an extremely effective way of providing mentees with access to mentors to whom they would otherwise never have had access. The findings also established that mentee preference as to the gender of their mentor needed to be considered in the matching process. Cross-department mentoring was strongly supported albeit with some hesitancy on cross-faculty matching as some respondents felt there needed to be some degree of mutual understanding of the discipline for the relationship to be effective. A relational mentee-led scheme with clearly defined timelines was found to be most effective. In addition, mentor and mentee training was considered to be very important for ensuring that both parties were clear on the 'mentoring boundaries'. The findings also pointed to the need for the formal mentoring process to be open to all employees of both genders. The research further establishes that mentoring should be for all levels, not just junior staff. Employees taking on new senior roles also require mentoring support.

SRQ3 – How does knowledge sharing and transfer take place within the mentoring?

The evidence presented establishes that the knowledge exchanged within formal mentoring relationships within the case study institution is primarily tacit in nature – knowledge that is not written down or formally verbalised but the transfer of life experience from one person to another (Polanyi, 1966) through the spoken word. "*That kind of institutional knowledge" (*ME/MR1). Within the HE sector, knowledge is central to everything we do. Knowledge sharing within formal mentoring should, therefore, be highly respected, acknowledged and encouraged so as to ensure that the wealth of knowledge that exists in the minds of mentors is transferred to less experienced staff and not lost to the institution.

For new knowledge to be created, there must be a willingness from those who have the knowledge – the 'know-how' (Garavan et al*.,* 2007; Gubbins et al*.,* 2012; Swart et al*.,* 2014) – to share it with others. My research certainly provides evidence that within the HE sector, senior members of staff are more than willing to share their knowledge

because being valued professionally gives them a deep sense of satisfaction. The HE sector would do well to be mindful of this and acknowledge the contribution that mentors make to institutions by being 'pro-social' and giving freely of their time to mentor less experienced members of staff.

As the fourth leg of the academic stool (Jacob, 1997), institutions and organisations alike should be aware of the knowledge-creating value of mentoring and acknowledge formal mentoring as a key contributor to their success. This research supports the claim that mentoring is about creating knowledge (Bryant, 2005). As set out when mentors share tacit knowledge with mentees in a trusting relationship, that tacit knowledge is converted into explicit knowledge and results in the creation of new knowledge, new ideas, new cross-faculty/cross-department research collaborations, etc.

Valuing mentoring as a professional and career development tool is a key finding of my research. By supporting the ongoing knowledge-conversion process internally, the return on investment in formal mentoring is extensive when compared to the cost of externally provided programmes

SRQ4 – What are the key outcomes of the mentoring process as experienced by both mentees and mentors?

Finally, in answer to SRQ4, the findings presented strong evidence that mentees and mentors alike gain from being involved in formal mentoring. Intrinsic rewards such as mutual learning, substantial knowledge transfer, increased confidence, improved organisation skills, greater self-awareness, time for self-reflection, enhanced communication and management skills, expanded networks and a sense of belonging were all key outcomes experienced by both the mentee and the mentor. For most mentees, the key motivation of the formal mentoring programme was to *"learn the tricks of the trade"* (ME9) and *"how to play the game in terms of research and career prospect"* (ME3) to access that vast tacit knowledge that mentors have and mentees need.

The research found that mentors volunteer for a variety of reasons, including wanting to *"keep in touch with the things that the junior people feel are wrong"* (ME/MR2). Those volunteering their time as mentors also gained. Their networks increased, many were prompted to re-evaluate their own career paths and some made a positive career move since being involved in the scheme.

Mentees commented on the benefits of the mentoring relationship in terms of increased levels of confidence and assertiveness, career planning and greater awareness of other departments' structures and how the university was managed. Mentees gave examples of positive career moves they had made, including applying for promotions and more senior posts, cross-faculty collaborations, successful funding applications and altered career pathways.

The main strengths of the formal mentoring programme were that it was voluntary and confidential, that if fell outside of the normal line-management relationship and that careful attention had been given to matching mentors and mentees.

My research findings also showed that the cross-department nature of formal mentoring led to many collaborative research initiatives and some successful grant applications. Institutions should acknowledge the role mentoring can play in supporting their strategic objective of strengthening their research profiles internationally.

The findings further established that mentoring provides participants with the mental space for self-reflection, new insights and learning. It provides the time and space to *"take time out to figure out what you want to do in the context of work and life"* (ME11). Surprisingly, with the expection of one mentee not being able to access her mentor, very few negative outcomes were experienced.

In conclustion, formal mentoring within HE provides a forum for the 'knowledge spiral to flourish' (Nonaka and Takeuchi, 1995). It enables the sharing of valuable tacit knowledge in a confidential and trusting environment, thereby ensuring the spiral process of interactions between explicit and tacit knowledge is captured. Without a formal mentoring process, this expert knowledge is likely to be lost. Having a formal mentoring scheme sends a signal to staff, particularly with the HE section, that their knowledge, which is primarily tacit in nature and learned from personal experience and expertise, is valued.

6.2 Contribution to knowledge

Influenced by the SECI model (Nonaka and Takeuchi, 1995), a theoretical model of mentoring from a knowledge-based view is presented in Figure 6.1. This model draws together the findings and discussion through the thematic analysis (TA) approach undertaken in my research.

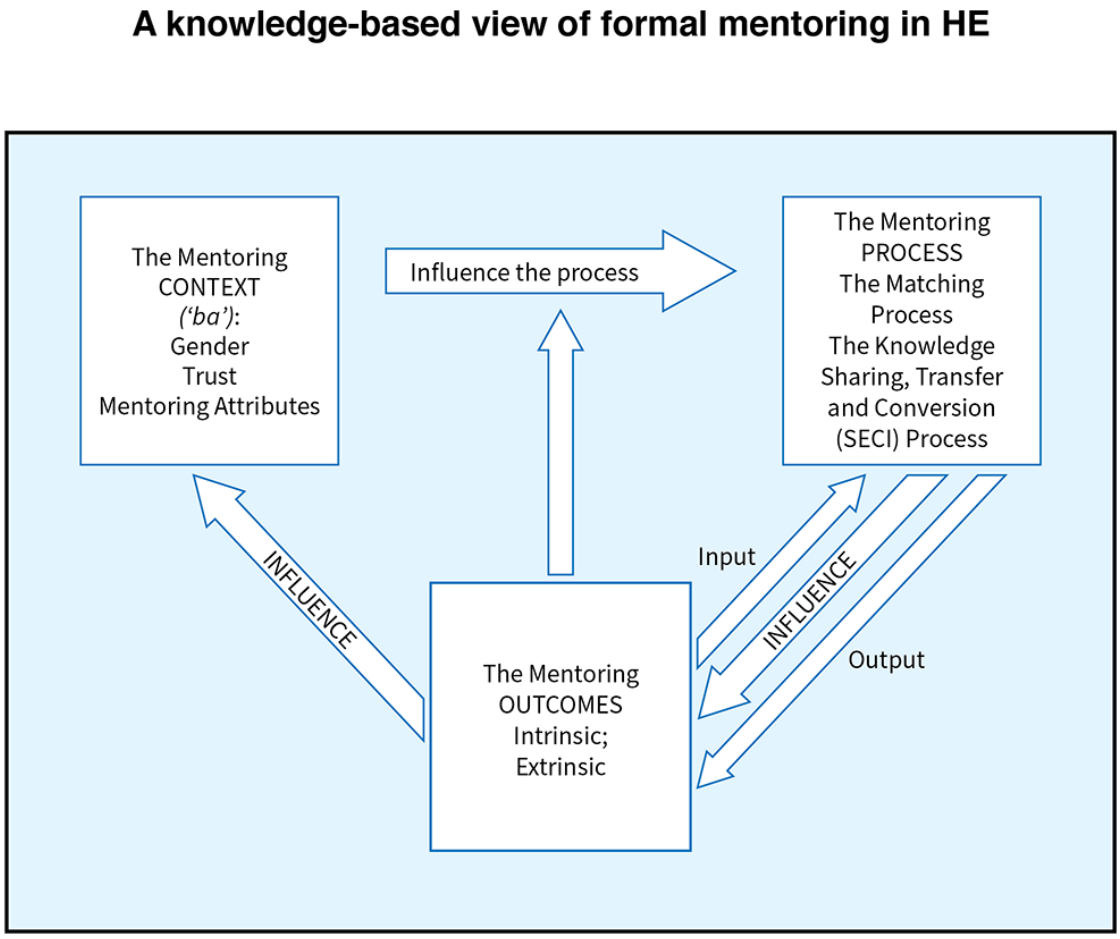

Figure 6.1 A knowledge-based view of formal mentoring in HE (developed by the author, 2017)

As set out in chapter 2, there are many different aspects of mentoring. These include traditional mentoring, peer-to-peer mentoring, co-mentoring, developmental mentoring, goal-specific mentoring, mentoring circles, muse mentoring, e-mentoring and relational mentoring. All of these evoke many different types of arrangements, from formal to informal, including one-to-one (dyadic) pairs, peer-to-peer and senior-to-junior arrangements, and mentoring circles. There are also many models of mentoring that support the mentoring process, from the apprenticeship model, to the competency model, to the reflective practitioner model, to name but a few. Taken together or separately, they all have a contribution to make depending on the environment in which the mentoring is taking place.

At a conceptual level, however, few theoretical models on mentoring have focused on the knowledge-sharing aspect of the relationship. The literature on mentoring has typically concentrated on the mentoring relationship from a professional and career development perspective and has largely ignored the function of information and knowledge sharing, which can play a significant role in mentoring relationships (Bryant, 2005). The focus of my research was on formal mentoring from a knowledge-based perspective in HE. Nonaka and Takeuchi's (1995) philosophy on a multi-disciplined

approach to delivering organisational objectives by making the best use of knowledge intrigued me, in particular how this could pertain to knowledge sharing within the formal mentoring process. The knowledge-creating model (Nonaka et al., 2000), particularly the socialisation dimension of the model, which is the creation, sharing and conversion of knowledge through face-to-face interaction between workers in a safe shared space such as mentoring, (the SECI process), as presented in Figure 2.1, provided me with a unique framework for my research.

Utilising the theoretical model (Nonaka, et al., 2000) to inform my conceptual model (Figure 6.1), I included the key aspects of the mentoring process: the context, the process and the outcomes. In order to facilitate the socialisation process for the knowledge exchange to take place, the context ('ba') must be right. Trust must be established, an element of choice in the mentor must exist to ensure compatibility, and gender must be considered. Key attributes too must be in place. The research also established that within the 'context', institutional knowledge and experience are essential. Discipline, understanding and an understanding of institutional politics and how things are done in the institution are also important aspects of the context. In light of the research and as presented in Figure 5.1, which outlines a thematic analysis of mentoring from a knowledge-based perspective, these modifications could add further depth to the 'context' aspect of the conceptual model.

Within the mentoring process, the model presents how mentoring can provide a mental space, a 'ba', to enable knowledge workers to share knowledge across boundaries (Crotty, 1998). It provides for the spiral of knowledge to flourish. As with the context, institutional politics, how to play the game, are key explicit areas where knowledge is exchanged within the mentoring relationship. Vulnerability by the mentor and the mentee, sharing success and failures are also key aspects to be considered within the mentoring relationship. The formal mentoring process enables the sharing of valuable tacit knowledge in a confidential and trusting environment, thereby ensuring the spiral process of interactions between explicit and tacit knowledge is captured (the SECI process), converting the learning to new tacit knowledge (socialisation). Once shared in the face-to-face conversation within the mentoring relationship, the spiral of knowledge creation takes place. This results in the creation of new knowledge for the mentee – the socialisation process – within the tacit knowledge-enabling safe space ('ba'). Modifying the model to present the positive role that the sharing of 'tacit knowledge' contributes to the mentoring relationship could further enhance the conceptual model.

The model further addressed some of the concerns raised in the literature, such as the lack of concentration on the outcomes of mentoring relationships from a knowledge-based perspective and the over-generalisation of findings from corporate cultures to the HE sector calling on more rigorous investigation of mentoring in HE (Zellers et al., 2008). While some studies looked at the extent to which faculty members mentor other faculty members or postgraduate students in the HE sector (Merriam et al*.,* 1987;

Sands et al., 1991; Woodd, 1997; Bhopal and Brown, 2016), few looked at formal staff mentoring programmes within academia. Johnson (2015) too highlighted that the evidence presented to date on the outcomes of mentoring was unsystematic and lacked integration.

As set out in Section 4.4.3.1 and as presented in Figure 5.1, the research established that key intrinsic outcomes were experienced. These included enhanced knowledge and learning, greater levels of confidence and assertiveness, support with career planning, greater cross-discipline institutional/department awareness and expanded networks. The opportunity for self-reflection and being valued professionally were all outcomes experienced by mentors. Extrinsic outcomes such as success with promotions and collaborative research outputs and grant applications were also cited.

By presenting a new lens through which to view formal staff mentoring in the HE sector, my research makes an important contribution to the theory in this area. Somewhat unique to studies on mentoring, my research presents a qualitative view of both mentors and mentees. It establishes that the knowledge sharing that takes place in mentoring is primarily tacit in nature, i.e., a person's own knowledge, which is influenced by their experience and skills. This results in the creation of new knowledge for the mentee – the socialisation process – within the tacit knowledge-enabling safe space ('ba').

By presenting a more holistic view of mentoring from a knowledge-based perspective, my research aim was to go some way to look deeper into the mentoring relationship to learn more about the micro-processes that facilitate mentee growth and learning (Scandura and Williams, 2001; Zellers et al., 2008; Abdullah et al., 2014). The findings presented show that the knowledge exchanged within the mentoring relationship is of significant value to both mentor and mentee. The establishment of mutual trust from the outset is essential in order to facilitate mentee growth and learning. Within the mentoring context, involving mentees in the choice of their mentor goes some way to establishing this trust and compatibility (Rock and Garavan, 2011), thereby providing a formal forum for individuals to transfer tacit knowledge (Hislop, 2003; Smith and McKeen, 2003).

A further contribution to knowledge is the value that formal mentoring can have in challenging the 'macho misogynyistic culture' that is evident within the HE sector. Mentoring provides opportunities for men to hear women's stories and to develop a better understanding of the influence of gender within the institution. The extremely low representation of women at the most senior levels in the sector are evidence that there is a clear need for change: women fill only 21% of full professorships in Ireland (24% UK). The findings of this research can go some way to providing evidence that formal mentoring has resulted in valuable intrinsic and extrinsic outcomes, including promotions for some women. The study shows that some women lack self-confidence. Female mentees stated that without the encouragement of their mentor, they would not

have gone forward for promotion. Furthermore, the findings show that formal mentoring affords mentees the opportunity to access key mentors (men and women), which can give rise to collaborative research projects and success with research grant applications.

As set out in Chapter 2, the willingness to share what we know is very much intertwined with our own personal attitude and organisational commitment (Swart, et al*.,* 2014). Contributing to self-efficacy (Bandura, 1997; Lee Endres et al., 2007) and social capital theories (Bozionelos, 2003, 2006; Bozionelos & Wang, 2006), we see that mentors are motivated to engage in giving voluntarily of their time to mentor for many differing reasons but primarily *"to give something back"* (ME/MR1). For some, participating in mentoring is for engaging socially, expanding their own networks and keeping their finger on the pulse regarding the challenges young academics face in the institution. Most mentors are motivated to participate by the opportunity to share their wide institutional knowledge – that tacit knowledge that is not written down and would otherwise be lost but when shared can significantly help mentees to navigate the various aspects of their positions and environments.

For others, being valued professionally was a key motivator to participating. A further contribution to the knowledge, therefore, is that providing a formal mentoring scheme sends a signal to staff that their knowledge and expertise, particularly within the HE sector, where 'knowledge is power', is valued.

Conscious that the generalisability of the findings may be limited somewhat due to the size of my study, the evidence suggests that there is value in HEIs providing formal mentoring schemes as a trusted space ('ba') where knowledge can be shared and innovative new ideas devised. Valuing mentoring as a development tool and seeing it as a "co-learning, interdependent activity which encourages authentic dialogue and power sharing across all cultures, genders and hierarchical levels" (Darwin 2000, p.208) within the HE sector can, I am convinced, "transform workplace relationships" (Darwin 2000, p.208) and increase the extent to which institutions support their employees to reach their full potential. However, I would caution that the generalisability of these findings to other settings is uncertain, especially because of the differences between corporate cultures and that of higher education.

In summary, my theoretical contribution to knowledge is the development of a new, knowledge-based perspective of formal mentoring in HE (Figure 6.1). My contribution presents a new lens through which formal mentoring within the HE sector can be considered, i.e., as a key contributor to the development of staff by giving rise to valuable key intrinsic and extrinsic outcomes for the mentee, the mentor and the institution as a whole.

6.3 Contribution to professional practice

Listed below are a number of my research findings that contribute to professional practice.

- Formal mentoring provides access to senior personnel, who would otherwise be out of reach.

  The literature and the empirical data gathered from my study highlight a number of areas that HEIs and HR professionals should bear in mind when considering implementing a formal mentoring programme. While the formal matching of mentors and mentees received resounding positive feedback from participants in my study because the process provides mentees with access to very senior personnel to whom they would otherwise not have access, the need for an element of choice within the process is essential to ensure compatibility and the establishment of trust from the outset.

- Formal mentoring provides a substantial return on investment for HEIs.

  It is impossible to put a monetary value on formal mentoring. Suffice to say that were institutions to engage external providers to deliver one-to-one coaching to their staff, the costs would be prohibitive. As an intervention that delivers a good return on investment, mentoring certainly can exceed what other training interventions purport to deliver with little investment other than the cost of providing training for mentors and mentees and of managing the mentoring scheme internally.

- Formal mentoring successfully transfers learning from the mentor to the mentee.

  As mentoring is an intervention over a 12-month period, the transfer of learning from the mentor to the mentee is certainly evident; the research findings pointed to substantial tacit knowledge exchange and enhanced learning for mentees and mentors.

- Mentors' contribution should be formally recognised.

  HEIs should consider formally recognising the time senior staff give voluntarily to mentor less experienced staff, perhaps through workload models and within the promotions process.

- Formal mentoring can be a valuable organisation development tool.

  The research findings show that mentoring is a valuable learning process. Mentoring sends a signal to members of the organisation that the development of staff to reach their full potential is critical to the realisation of organisational goals. By encouraging individuals to share both tacit and explicit knowledge with others in one-to-one mentoring relationship, organisations are ensuring that valuable knowledge is not lost.

- Mentoring should be available to all employees (men and women).

  The fear that mentoring is becoming 'gendered' and seen as a fix for women is a concern. Organisations need to see the value of mentoring for both genders in an effort to ensure gender equality within our institutions. Women are not the problem and they do not need fixing but they need access to knowledge, which typically, in the past, was made available through the 'old boy's network'. Those networks need to become gender neutral so that all staff have an equal opportunity to achieve their full potential.

- Gender equality across all HEIs needs to be addressed.

  Gender equality is a key strategic objective in most institutions. Addressing the gender imbalance at the most senior levels in HEIs is of the utmost importance. The need to engage men in the conversation is clear from the findings of my study. Mentoring is one intervention that can be used to encourage men to engage more fully in addressing these concerns and to share their wealth of knowledge with mentees. Male mentors need first-hand exposure to the challenges women face. HEIs should certainly consider implementing the HeforShe or MARC (Men Advocating Real Change) programmes.

- A mentee-led formal mentoring scheme gives rise to successful outcomes.

  My research found that the 'mentee-led' aspect of mentoring is a key factor in determining the success of the mentoring programme, and I believe this is something practitioners need to be mindful of. Having the formal mentoring programme led by mentees puts the onus on the mentees to ensure that they make the most of their mentoring relationship. This involves completing the mentoring agreement that sets out key goals and objectives of the relationship and following up on the goals and objectives during the mentoring lifespan.

- Mentoring lifespan

  Having a timeline for the mentoring relationship was viewed very positively by the study participants. The duration of the relationship within the case study institution is 12 months. Allowing mentoring relationships to continue indefinitely was seen as tying up valuable resources (i.e. mentors) that other mentees could be using. My research finds that agreeing the timeframe at the outset fosters a more effective mentoring relationship and encourages mentees to make the most of the time allocated to the relationship.

- Challenging unconscious biases

  There is a need to challenge unconscious biases in key decision-making roles, such as interview and promotion panel memberships. As set out earlier in this chapter, the research shows that women are hired for their experience while men are hired for their potential. Challenging this type of thinking through interview skills training and unconscious bias training would certainly help change attitudes and

lead to better outcomes in the long term. Ensuring women are asked the same career-changing questions as men in interviews should be a given. In addition, providing women with critical, constructive feedback when unsuccessful is key to ensuring that they learn from the process and achieve success at the next attempt.

- Women as role models

  Women need to be willing to act as role models for less experienced staff. Often criticised for 'pulling up the ladder' behind them, women need to offer support through such interventions as mentoring.

- A mentor's suitability to mentor should be assessed.

  While all volunteers to mentor may be accepted, their suitability should be observed during training workshops; if the scheme co-ordinator is unsure of the person's suitability to mentor, the person should not be formally matched with a mentee. Bad mentoring can be destructive and, in some cases, worse than no mentoring at all (Ragins et al., 2000).

6.4 Limitations of the research

As set out in Chapter 3, previous studies on mentoring have generally been quantitative utilising a single method of data collection from a single source, typically the mentees (Allen et al., 2008). Somewhat unique to studies on mentoring, my research presents a qualitative view using multiple methods, with a single-case study, a focus group and semi-structured interviews allowing for a triangulation of data, mitigating any potential biases and assuring validity and a robust unbiased outcome. By presenting a more holistic view of mentoring from a knowledge-based perspective, with feedback gathered from both mentors and mentees, my research presents a new lens through which formal mentoring in the HE sector can be viewed.

While the main objective of the research was to present a new, knowledge-based perspective of mentoring, the sample in the study may be considered by some to be small –12 focus group participants and 27 interviewees (13 mentors; 12 mentees and 2 mentees/mentors) from a single case study institution. However, qualitative studies can have small sample sizes because the focus of the research is on analysing insights rather than providing a representative, statistically accurate representation. As all interview and focus group participants had been directly involved in the formal mentoring scheme, the participants were able to offer deep and meaningful insights into mentoring within the sector. Some, but not all, of those interviewed were from matched pairs. A consideration in the future however, would be to interview matched pairs to compare and contrast the feedback received.

I decided to use a qualitative approach on the basis of the nature of the "social phenomena to be explored" (Morgan and Smircich, 1980, p.491). An inductive approach to studying the mentors' and mentees' responses directly rather than

reducing people to statistical aggregates, as is the case with a quantitative approach, was the most appropriate approach to use for this study. However, as set out, it is apparent that quantitative approaches to studying mentoring have been successfully undertaken in the past. In fact, there have been more quantitative than qualitative studies of mentoring, with researchers calling for more qualitative analysis.

The impact of the theoretical framework used in the research (Figure 6.1) needs some consideration. The framework direction focuses on particular aspects of the study, i.e., the mentoring context, process and outcomes from a knowledge-based perspective, but not on other aspects, which another approach may have considered significant. While the literature is, in itself, constructive in providing a theoretical framework, the research questions and the ensuing responses received do not, I would argue, limit any findings.

Mindful of the need to match the data collection method with the research questions and being aware of the potential limitations of the questions, a focus group was undertaken to test the research questions to ensure there were no potential limitations. Following the focus group, I restructured some of the questions to ensure they would elicit feedback on the key areas under investigation, i.e., mentoring from a knowledge-based perspective.

Another limitation to qualitative research is the dependency on the personal skills of the researcher, which can easily be influenced by personal biases and idiosyncrasies and make it difficult for rigor to be maintained, assessed and demonstrated. I used the data analysis tool NVivo, which generates clearly presented audit trails, to address these concerns.

Further limitations that could be levelled at this study are that it focused solely on (i) the HE sector and (ii) one institution. An expansive study comparing formal mentoring within the HE sector with international corporate cultures is certainly an avenue that could and should be investigated. The findings from such a study would certainly present a new lens and add to the theory on mentoring. However, for my particular research, this would not have been appropriate and it would have taken from the focus, which was the HE sector where a clear gap in the theory had been identified.

While the study presents data on the extrinsic effects of mentoring on mentees' and mentors' career advancement, the fact that the sample was small made it difficult to present a convincing outcome that involvement in mentoring can be directly linked to successful career outcomes such as promotion. However, data were presented from Queen's University Belfast in this regard. Quantitative data tracking mentees' advancement over the past 10 years would enhance the study and provide evidence as to whether mentoring leads to successful promotions. Asking (by questionnaire) those who have been promoted if they attribute their success to involvement in mentoring

would provide very valuable data. It is my intention to undertake this research as a follow-up to this study.

Finally, the study focused on mentoring from a gender perspective and did not consider other intersectionality aspects of the mentoring relationship, such as culture, ethnicity or disability, which may be seen as a limitation. While some studies within the sector have contributed excellent data in this regard (Bhopal and Brown, 2016), further studies within the Irish HE sector should be considered.

6.5 Agenda for future research

This study provides a suitable base for further research that would contribute to the literature on mentoring outcomes, as set out above.

The under-representation of women at the most senior levels in HEIs is a global issue. This is certainly true for Ireland, as evidenced by the fact that only one-quarter of professorships are held by women despite women comprising more than half the workforce in the HE section (HEA 2017). Conducting more formal research on the extrinsic outcomes of those who have and have not been mentored could provide some interesting information that could inform the design of future formal mentoring schemes in the sector. Research on the comparative success of men and women in the promotions process is another area of interest to me.

In a study of black and minority ethnic leaders, the lack of formal support was something that respondents felt held them back (Bhopal and Brown, 2016). Women, in particular, need support to advance their careers. The intersectionality between gender and how various other forms of inequality interconnect for minority women needs further investigation from a mentoring perspective.

To ensure that mentoring does not become gendered, research into why more women than men avail of mentoring would provide some very useful information and could contribute to informing further formal mentoring programmes within the sector.

Irish women perform better than men in education. However, in Ireland in 2015, there was a 15% difference in median pay between men and women; the OECD (Organisation for Economic Co-operation and Development) cited a 16% difference even where women are more qualified. Investigating whether a gender pay gap exists within the sector is certainly another potential area for future investigation.

Finally, the model presented in this study focuses on mentoring from a knowledge-based perspective in the HE sector. It would be interesting to replicate this qualitative study with larger sample groups in other sectors to further examine the model and to overcome the limitation of generalising from one study. It would also help determine if these findings are unique to this particular study and to this particular sector.

6.6 A reflection on my journey

"Wisdom is not a product of schooling but of the lifelong attempt to acquire it."
Albert Einstein

Positivity and perseverance are what I have taken from my research journey. Having a positive attitude certainly helped me get through difficult times during this long project. You need to be passionate about your chosen research topic to persevere. In my case, mentoring, knowledge and gender are the topics close to my heart; I felt passionately about them during my research journey, and still do.

I have been an ardent learner throughout my life. Finishing secondary school at the tender age of 16 with an honours Leaving Certificate, I spent less than one year in a third-level college before being offered an excellent opportunity in the corporate world. With three children under the age of three, I returned to part-time education 10 years later. This was not an easy choice for me to make because it involved a 52-mile return journey two nights a week for four years while working full-time and coping on my own at the time. My little boy only wanted to know when "I would be finished with my books".

The children spent many hours with me in the institution where, as it happens, I now work. However, I revelled in the learning experience and set goals for myself, which I continually achieved. I then decided I wanted to continue with this journey, despite its many challenges. Having finished my undergraduate degree, I achieved a master's degree in education two years later. From there, I completed numerous other programmes, including a Postgraduate Diploma in Executive Coaching. It was during this reflective programme that I made the decision to continue with my studies and pursue a DBA (Doctor of Business Administration). As Magnus Magnusson of Mastermind put it, "I've started so I'll finish". For me, the learning comes from interacting with others – that tacit-to-tacit knowledge exchange that creates new explicit knowledge. I certainly needed the debate and exchange that the DBA programme provided for me.

I often wonder if life would have been very different for me if I had taken a different route at 16 and taken up the university place offered to me. As they say, you make the choices so you have to deal with the consequences. As I sit here and write this now, I realise that, for me, the consequences have been a 20+-year journey of self-discovery and learning.

During the DBA journey, I had many emotional experiences, most of which involved wishing I had 'more time'. Undertaking the DBA certainly opened my mind to the challenging world of the academic. I certainly have a newfound respect for my academic colleagues. I enjoyed every minute of the learning experience and acquiring new knowledge.

When I started out on this journey, I did not have this understanding. Sitting in a DBA lecture presented by my supervisor on human capital and knowledge, I had one of those 'light bulb' moments. I wanted to learn more about the topic. As Learning and Development Manager in my institution at the time, I was responsible for setting up a formal mentoring programme. While feedback from the programme had been positive, if somewhat mixed at times, I wanted to learn more directly from those involved as to the learning experienced and the knowledge attained, if any. Choosing a topic relevant to my professional role and experience was important to me. I wanted the research not only to be of value to me personally but also to contribute to my institution and make a theoretical contribution to knowledge.

Not realising at the time just how vast the topic of knowledge was, I set about my own learning journey by exploring what exactly the term 'knowledge' means. As set out in Chapter 2, knowledge is a "dynamic human process of justifying personal belief toward the truth" (Nonaka and Takeuchi 1995, p.58). Exploring the topic of knowledge took me down such an interesting route and expanded my own personal knowledge greatly.

The literature presented me with new and exciting information; I needed to rewrite my thesis many times to ensure I captured the most relevant aspects of mentoring from a knowledge-based perspective. The interviewing process was engaging, and the participant mentors and mentees were extremely giving and open. Without exception, all of them wanted to communicate their own personal mentoring experiences and outcomes and felt that the programme should be more highly valued by the institution. As can be seen in the research, mentors and mentees alike were extremely engaged in the topic of experiencing and exchanging knowledge within the mentoring programme. I found this interesting because before setting out on this journey, I know I would not have asked them about the knowledge they might have gleaned from their involvement in the mentoring scheme. My personal learning from this is that you need to ask the right questions to get worthwhile feedback.

The joy of my learning was often times frustrated by the shortage of time available to me to pursue what I really wanted to pursue. Life just gets in the way. The literature review alone could have kept going because I continued to uncover so much more on that never-ending topic of knowledge exchange. I know and welcome the fact that I will continue to acquire a deeper understanding of this topic for many years to come.

As my role has recently expanded to that of Head of Equality and Diversity in my institution, tackling the issue of gender inequality in higher education is a journey I have been taking, and will continue to take, well into the future. The DBA has equipped me with the knowledge to continue this journey as a valued member of the HE community.

"To attain knowledge, add things every day. To attain wisdom, remove things every day."

Lao Tzu

Bibliography

Abdullah, G., Rossy, D., Ploeg, J., Davies, B., Higuchi, K., Sikora, L. and Stacey, D. (2014) 'Measuring the effectiveness of mentoring as a knowledge translation intervention for implementing empirical evidence: a systematic review', *Worldviews on Evidence‐Based Nursing*, 11(5), 284-300.

Acker, J. (1990) 'Hierarchies, jobs, bodies: a theory of gendered organizations', *Gender & Society*, 4(2), 139-158.

Adam, M. (1986) *The effects of mentoring of the career paths of administrators in community colleges in the state of Michigan,* unpublished thesis, Western Michigan University, available: http://scholarworks.wmich.edu/dissertations/2309.

Alasuutari, P., Bickman, L. and Brannen, J. (2008) *The SAGE handbook of social research methods*, London: SAGE Publications.

Allen, T.D., Day, R. and Lentz, E. (2005) 'The role of interpersonal comfort in mentoring relationships', *Journal of Career Development*, 31(3), 155-169.

Allen, T.D. and Eby, L.T. (2007) 'Common bonds: an integrative view of mentoring relationships' in Allen, T.D. and Eby, LTD., eds., *The Blackwell handbook of mentoring: a multiple perspectives approach*, Oxford: Blackwell Publishing, 398-419.

Allen, T.D., Eby, L.T. and Lentz, E. (2006) 'Mentorship behaviors and mentorship quality associated with formal mentoring programs: closing the gap between research and practice', *Journal of Applied Psychology*, 91(3), 567.

Allen, T.D., Eby, L.T., O'Brien, K.E. and Lentz, E. (2008) 'The state of mentoring research: A qualitative review of current research methods and future research implications', *Journal of Vocational Behavior*, 73(3), 343-357.

Allen, T.D., Eby, L.T., Poteet, M.L., Lentz, E. and Lima, L. (2004) 'Career benefits associated with mentoring for proteges: a meta-analysis', *Journal of Applied Psychology*, 89(1), 127.

Allen, T.D., Russell, J.E. and Maetzke, S.B. (1997) 'Formal peer mentoring factors related to proteges' satisfaction and willingness to mentor others', *Group & Organization Management*, 22(4), 488-507.

Andreeva, T. and Ikhilchik, I. (2011) 'Applicability of the SECI model of knowledge creation in Russian cultural context: theoretical analysis', *Knowledge and Process Management*, 18(1), 56-66.

Angelique, H., Kyle, K. and Taylor, E. (2002) 'Mentors and muses: new strategies for academic success', *Innovative Higher Education*, 26(3), 195-209.

Argote, L. and Ingram, P. (2000) 'Knowledge transfer: a basis for competitive advantage in firms', *Organizational Behavior and Human Decision Processes*, 82(1), 150-169.

Bandura, A. (1997) *Self-efficacy: the exercise of control*, New York: Macmillan.

Banister, P. (2011) *Qualitative methods in psychology: a research guide*, Berkshire England: Open University Press McGraw-Hill Education.

Bazeley, P. (2009) 'Analysing qualitative data: more than 'identifying themes'', *Malaysian Journal of Qualitative Research*, 2(2), 6-22.

Beardwell, J. and Claydon, T. (2007) *Human resource management: a contemporary approach*, Harlow: Pearson Education.

Beiske, B. (2002) *Research methods. Uses and limitations of questionnaires, interviews, and case studies,* Munich: Grin.

Bell, E. and Bryman, A. (2007) 'The ethics of management research: an exploratory content analysis', *British Journal of Management*, 18(1), 63-77.

Bennet, D. and Bennet, A. (2008) 'Engaging tacit knowledge in support of organizational learning', *Vine*, 38(1), 72-94.

Berman, S.L., Down, J. and Hill, C.W. (2002) 'Tacit knowledge as a source of competitive advantage in the National Basketball Association', *Academy of Management journal*, 45(1), 13-31.

Bhopal, K. and Brown, H. (2016) *Black and minority ethnic leaders: support networks and strategies for success in higher education,* London: Leadership Foundation for Higher Education.

Biggerstaff, D. and Thompson, A.R. (2008) 'Interpretative phenomenological analysis (IPA): a qualitative methodology of choice in healthcare research', *Qualitative Research in Psychology*, 5(3), 214-224.

Blackwell, J.E. (1989) 'Mentoring: an action strategy for increasing minority faculty', *Academe*, 75(5), 8-14.

Bodsworth, C. (2011) *Creating a coaching culture*, London: Institute of Leadership & Management-Research findings'

Bogdan, R. and Taylor, S.J. (1990) 'Looking at the bright side: a positive approach to qualitative policy and evaluation research', *Qualitative Sociology*, 13(2), 183-192.

Bogdan, R.T. and Taylor, S. (1975) 'SJ (1975). Introduction to qualitative research methods: a phenomenological approach to the social sciences', *Teaching Sociology*, 5(2), 213-216.

Boice, R. (1992) *The new faculty member: supporting and fostering professional development*, San Francisco: Jossey-Bass.

Bolino, M.C., Turnley, W.H. and Bloodgood, J.M. (2002) 'Citizenship behavior and the creation of social capital in organizations', *Academy of Management Review*, 27(4), 505-522.

Bozionelos, N. (2004) 'Mentoring provided: relation to mentor's career success, personality, and mentoring received', *Journal of Vocational Behavior*, 64(1), 24-46.

Bozionelos, N. (2006) 'Mentoring and expressive network resources: their relationship with career success and emotional exhaustion among Hellenes employees involved in

emotion work', *The International Journal of Human Resource Management*, 17(2), 362-378.

Bozionelos, N. and Wang, L. (2006) 'The relationship of mentoring and network resources with career success in the Chinese organizational environment', *The International Journal of Human Resource Management*, 17(9), 1531-1546.

Braun, V. and Clarke, V. (2006) 'Using thematic analysis in psychology', *Qualitative Research in Psychology*, 3(2), 77-101.

Brocki, J.M. and Wearden, A.J. (2006) 'A critical evaluation of the use of interpretative phenomenological analysis (IPA) in health psychology', *Psychology and Health*, 21(1), 87-108.

Bryant, S.E. (2005) 'The impact of peer mentoring on organizational knowledge creation and sharing: an empirical study in a software firm', *Group & Organization Management*, 30(3), 319-338.

Bryman, A. (2004) 'Qualitative research on leadership: a critical but appreciative review', *The Leadership Quarterly*, 15(6), 729-769.

Bryman, A. (2012) Social Research Methods, 4th ed., Oxford: Oxford University Press.

Bryman, A. and Bell, E. (2003) *Business research methods*, Oxford: Oxford University Press.

Bryman, A. and Bell, E. (2015) *Business research methods*, 4th ed., Oxford: Oxford University Press.

Burke, R.J. (1984) 'Mentors in organizations', *Group & Organization Studies*, 9(3), 353-372.

Burke, R.J. and McKeen, C.A. (1997) 'Benefits of mentoring relationships among managerial and professional women: a cautionary tale', *Journal of Vocational Behavior*, 51(1), 43-57.

Burrell, G. and Morgan, G. (2009) *Sociological paradigms and organizational analysis: elements of the sociology of corporate life*, Aldershot: Asgate Publishing.

Cameron, S.W. (1978) *Women faculty in academia: sponsorship, informal networks, and scholarly success*, unpublished thesis, University of Michigan.

Cameron, S.W. and Blackburn, R.T. (1981) 'Sponsorship and academic career success', *The Journal of Higher Education*, 52(4), 369-377.

Campbell, R., Angelique, H., BootsMiller, B.J. and Davidson, W.S. (2000) 'Practicing what we preach: integrating community psychology into the job search process', *Journal of Prevention & Intervention in the Community*, 19(2), 33-43.

Cassell, C. and Johnson, P. (2006) 'Action research: explaining the diversity', *Human Relations*, 59(6), 783-814.

Chao, G.T., WALZ, P. and Gardner, P.D. (1992) 'Formal and informal mentorships: a comparison on mentoring functions and contrast with nonmentored counterparts', *Personnel Psychology*, 45(3), 619-636.

Charmaz, K. (2011) 'Grounded theory methods in social justice research' in Denzin N.K. and Lincoln Y.S., eds, *The SAGE handbook of qualitative research*, 4th ed., Thousand Oaks, California: SAGE Publications, 359-380.

Clark, M.S. and Mils, J. (1993) 'The difference between communal and exchange relationships: what it is and is not', *Personality and Social Psychology Bulletin*, 19(6), 684-691.

Clark, S.M. and Corcoran, M. (1986) 'Perspectives on the professional socialization of women faculty: a case of accumulative disadvantage?', *The Journal of Higher Education*, 57(1), 20-43.

Clawson, J.G. and Kram, K.E. (1984) 'Managing cross-gender mentoring', *Business Horizons*, 27(3), 22-32.

Clutterbuck, D. (1985) *Everyone needs a mentor*, London: Universities Press.

Clutterbuck, D. (2004) *Everyone needs a mentor: Fostering talent in your organisation*, 4th ed., London: CIPD Publishing.

Clutterbuck, D. and Megginson, D. (1999) *Mentoring executives and directors*, Oxford: Butterworth-Heinemann.

Clutterbuck, D. and Ragins, B.R. (2002) *Mentoring and diversity: An international perspective*, Oxford: Butterworth-Heinemann.

Coff, R.W., Coff, D.C. and Eastvold, R. (2006) 'The knowledge-leveraging paradox: how to achieve scale without making knowledge imitable', *Academy of Management Review*, 31(2), 452-465.

Collins, N.W. (1983) *Professional women and their mentors: a practical guide to mentoring for the woman who wants to get ahead*, Englewood Cliffs, NJ: Prentice Hall.

Colliver, J.A. (2002) 'Constructivism: the view of knowledge that ended philosophy or a theory of learning and instruction?', *Teaching and Learning in Medicine*, 14(1), 49-51.

Cope, J. (2011) 'Entrepreneurial learning from failure: an interpretative phenomenological analysis', *Journal of Business Venturing*, 26(6), 604-623.

Cranwell-Ward, J., Bossons, P. and Gover, S. (2004) *Mentoring: a Henley review of best practice*, Basingstoke, Hampshire: Palgrave Macmillan.

Creswell, J.W. (2012) *Research design*: *qualitative, quantitative, and mixed method,* 3rd ed., New Delhi: SAGE Publications.

Creswell, J.W. (2013) *Research design: qualitative, quantitative, and mixed methods approaches,* 4th ed., Thousand Oaks, California: SAGE Publications.

Crotty, M. (1998) *The foundations of social research: meaning and perspective in the research process*, Thousand Oaks, California: SAGE Publications.

Daloz, L.A. (1986) *Effective teaching and mentoring: realizing the transformational power of adult learning experiences*, San Francisco: Jossey-Bass.

Dalton, G.W., Thompson, P.H. and Price, R.L. (1977) 'The four stages of professional careers—a new look at performance by professionals', *Organizational Dynamics*, 6(1), 19-42.

Daly, J., Kellehear, A. and Gliksman, M. (1997) *The public health researcher: a methodological guide,* Melbourne: Oxford University Press.

Darwin, A. (2000) 'Critical reflections on mentoring in work settings', *Adult Education Quarterly*, 50(3), 197-211.

Darwin, A. and Palmer, E. (2009) 'Mentoring circles in higher education', *Higher Education Research & Development*, 28(2), 125-136.

Davenport, T.H. and Prusak, L. (1998) *Working knowledge: how organizations manage what they know*, Boston: Harvard Business Press.

Day, R. and Allen, T.D. (2004) 'The relationship between career motivation and self-efficacy with protégé career success', *Journal of Vocational Behavior*, 64(1), 72-91.

Denzin, N.K. (1978) 'Sociological methods: critical reflections and the logic of naturalistic enquiry' in Denzin, N.K., ed., *Sociological methods: a source book*, New York, NY: McGraw-Hill, 1-29.

Dogson, J. (1986) 'Do women in education need mentors?', *Education Canada*, 26(1), 28-33.

Doherty, L., Manfredi, S., de Vries, J., Webb, C. and Eveline, J. (2006) 'Mentoring for gender equality and organisational change', *Employee Relations*, 28(6), 573-587.

Dougherty, T.W. and Dreher, G.F. (2007) 'Mentoring and career outcomes: conceptual and methodological issues in an emerging literature' in Ragins, B.R. and Kram, K.E., eds., *The handbook of mentoring at work: theory, research and practice*, Thousand Oaks, California: SAGE Publications, 51-93.

Dreher, G.F. and Cox Jr, T.H. (1996) 'Race, gender, and opportunity: a study of compensation attainment and the establishment of mentoring relationships', *Journal of Applied Psychology*, 81(3), 297.

Durgee, J.F. (1987) 'Phenomenology: new methods for asking questions and interpreting results' in Wallendorf, M and Anderson, P., eds., *NA – Advances in Consumer Research,* Volume 14, Provo, Utah: Association for Consumer Research, 561.

Dutton, J.E. and Ragins, B.R. (2007) *Exploring positive relationships at work: building a theoretical and research foundation*, Mahwah, NJ: Lawrence Erlbaum Associates Publishers.

Easterby-Smith, M., Thorpe, R. and Jackson, P.R. (2012) *Management research*, 4th ed., London: SAGE Publications.

Easterby-Smith, M., Thorpe, R. and Lowe, A. (1991) *Management research: an introduction*, London, SAGE Publications.

Eby, L.T., Butts, M.M., Durley, J. and Ragins, B.R. (2010) 'Are bad experiences stronger than good ones in mentoring relationships? Evidence from the protégé and mentor perspective', *Journal of Vocational Behavior*, 77(1), 81-92.

Eby, L.T. and Lockwood, A. (2005) 'Protégés' and mentors' reactions to participating in formal mentoring programs: a qualitative investigation', *Journal of Vocational Behavior*, 67(3), 441-458, available: http://dx.doi.org/http://dx.doi.org/10.1016/j.jvb.2004.08.002.

Eby, L.T., Rhodes, J.E. and Allen, T.D. (2007) 'Definition and evolution of mentoring' in Eby, L.T. and Allen, T.D., eds., *The Blackwell handbook of mentoring: a multiple perspectives approach*, Oxford: Blackwell Publishing, 7-20.

Feilzer, M.Y. (2010) 'Doing mixed methods research pragmatically: implications for the rediscovery of pragmatism as a research paradigm', *Journal of Mixed Methods Research*, 4(1), 6-16.

Fielding, N.G., Lee, N.F.R.M. and Lee, R.M. (1998) *Computer analysis and qualitative research*, London: SAGE Publications.

Fleig-Palmer, M.M. and Schoorman, F.D. (2011) 'Trust as a moderator of the relationship between mentoring and knowledge transfer', *Journal of Leadership & Organizational Studies*, 18(3), 334-343.

Fleming, M., House, M.S., Shewakramani, M.V., Yu, L., Garbutt, J., McGee, R., Kroenke, K., Abedin, M.Z. and Rubio, D.M. (2013) 'The mentoring competency assessment: validation of a new instrument to evaluate skills of research mentors', *Academic Medicine: Journal of the Association of American Medical Colleges*, 88(7), 1002.

Fletcher, J.K. and Ragins, B.R. (2007) 'Stone center relational cultural theory' in Ragins, B.R. and Kram, K.E., eds., *The handbook of mentoring at work: theory, research, and practice*, Thousand Oaks, California: SAGE Publications, 373-399.

Fouché, C. and Lunt, N. (2010) 'Nested mentoring relationships: reflections on a practice project for mentoring research capacity amongst social work practitioners', *Journal of Social Work*, 10(4), 347-367.

Fowler, D.L. (1982) 'Mentoring relationships and the perceived quality of the academic work environment', *Journal of the NAWDAC*, 45(3), 27-33.

Garavan, T.N., O'Brien, F. and Murphy, E. (2014) 'Knowledge management in small and medium-sized enterprises: navigating informality and resource constraints' in Örtenblad, A., ed., *Handbook of research on knowledge management: adaptation and context*, Cheltenham: Edward Elgar Publishing, 189-207.

Garavan, T.N., Carbery, R. and Murphy, E. (2007) 'Managing intentionally created communities of practice for knowledge sourcing across organisational boundaries: Insights on the role of the CoP manager', *The Learning Organization*, 14(1), 34-49.

Garavan, T.N. and McCarthy, A. (2008) 'Collective learning processes and human resource development', *Advances in Developing Human Resources*, 10(4), 451-471.

Garavan, T.N. and McGuire, D. (2001) 'Competencies and workplace learning: some reflections on the rhetoric and the reality', *Journal of Workplace Learning*, 13(4), 144-164.

Garavan, T.N., Morley, M., Gunnigle, P. and Collins, E. (2001) 'Human capital accumulation: the role of human resource development', *Journal of European Industrial Training*, 25(2/3/4), 48-68.

Gardiner, M., Tiggemann, M., Kearns, H. and Marshall, K. (2007) 'Show me the money! An empirical analysis of mentoring outcomes for women in academia', *Higher Education Research & Development*, 26(4), 425-442, available: http://dx.doi.org/10.1080/07294360701658633.

Gaskell, G. (2000) 'Individual and group interviewing' in Gaskell, G. and Bauer, M.W., eds., *Qualitative researching with text, image and sound: a practical handbook*, London: SAGE Publishing, 38-56.

Geertz, C. (1973) *The interpretation of cultures*, New York: Basic Books.

Gerdes, E.P. (2003) 'Do it your way: advice from senior academic women', *Innovative Higher Education*, 27(4), 253-275.

Gibb, S. (1994) 'Evaluating mentoring', *Education + Training*, 36(5), 32-39.

Gibb, S. and Megginson, D. (1993) 'Inside corporate mentoring schemes: a new agenda of concerns', *Personnel Review*, 22(1), 40-54.

Gibson, S.K. (2006) 'Mentoring of women faculty: the role of organizational politics and culture', *Innovative Higher Education*, 31(1), 63-79.

Gill, J. and Johnson, P. (2010) *Research methods for managers*, 4th ed., London: SAGE Publications.

Glaser, B.G. and Strauss, A.L. (2009) *The discovery of grounded theory: strategies for qualitative research*, New Brunswick, NJ: Transaction Publishers.

Goldstein, E. (1979) 'Effect of same-sex and cross-sex role models on the subsequent academic productivity of scholars', *American Psychologist*, 34(5), 407.

Greenhaus, J.H., Callanan, G.A. and Godshalk, V.M. (2009) *Career management*, Thousand Oaks, California: SAGE Publications.

Groysberg, B. (2008) 'How star women build portable skills', *Harvard Business Review*, 86(2), 74.

Guba, E.G. and Lincoln, Y.S. (1981) *Effective evaluation: improving the usefulness of evaluation results through responsive and naturalistic approaches*, San Francisco: Jossey-Bass.

Gubbins, C., Corrigan, S., Garavan, T.N., O'Connor, C., Leahy, D., Long, D. and Murphy, E. (2012) 'Evaluating a tacit knowledge sharing initiative: a case study', *European Journal of Training and Development*, 36(8), 827-847.

Gubbins, C. and Garavan, T. (2016) 'Social capital effects on the career and development outcomes of HR professionals', *Human Resource Management*, 55(2), 241-260.

Guest, G., MacQueen, K.M. and Namey, E.E. (2011) *Applied thematic analysis*, Thousand Oaks, California: SAGE Publications.

Hall, H. (2001) 'Input-friendliness: motivating knowledge sharing across intranets', *Journal of Information Science*, 27(3), 139-146.

Hamilton, L. and Corbett-Whittier, C. (2012) *Using case study in education research*, London: SAGE Publications.

Hamlin, R.G. and Sage, L. (2011) 'Behavioural criteria of perceived mentoring effectiveness: an empirical study of effective and ineffective mentor and mentee behaviour within formal mentoring relationships', *Journal of European Industrial Training*, 35(8), 752-778.

Hamrick, F.A. (1998) *"I have work to do": affirmation and marginalization of women full professors*, Washington: Eric.

Harney, A. (2012) 'Successful mentoring', *The Engineers Journal*, 66(1), 2.

Harris, Z.S. (1952) 'Discourse analysis: a sample text', *Language*, 28(4), 474-494.

Higher Education Authority (2016) *HEA national review of gender equality in Irish higher education institutions,* Dublin: Higher Education Authority, available: http://hea.ie/assets/uploads/2017/04/hea_review_of_gender_equality_in_irish_higher_education.pdf.

HEA (2017) *HEA institutional staff profiles by gender*, 2017, Dublin: HEA, available: http://hea.ie/assets/uploads/2017/07/HEA-Institutional-Staff-Profiles-Gender-July-2017-003.pdf

Healy, C.C. and Welchert, A.J. (1990) 'Mentoring relations: a definition to advance research and practice', *Educational Researcher*, 19(9), 17-21.

Hefferon, K. and Gil-Rodriguez, E. (2011) 'Interpretative phenomenological analysis', *Psychologist*, 24(10), 756-759.

Henkel, M. (2000) *Academic identities and policy change in higher education*, *higher education policy series,* London: Jessica Kingsley Publishers, 46.

Higgins, M.C. and Kram, K.E. (2001) 'Reconceptualizing mentoring at work: a developmental network perspective', *Academy of Management Review*, 26(2), 264-288.

Hinds, P.J. and Pfeffer, J. (2003) 'Why organizations don't "know what they know": cognitive and motivational factors affecting the transfer of expertise' in Ackerman, M., Pipek., V. and Wulf, V., eds., *Sharing expertise: beyond knowledge management*, Cambridge, Massachusetts: MIT Press, 3-26.

Hislop, D. (2003) 'Linking human resource management and knowledge management via commitment: a review and research agenda', *Employee Relations*, 25(2), 182-202.

Hodgkin, R.A. (1992) 'Michael Polanyi on the activity of knowing—the bearing of his ideas on the theory of multiple intelligences', *Oxford Review of Education*, 18(3), 253-267.

Holloway, I. and Todres, L. (2003) 'The status of method: flexibility, consistency and coherence', *Qualitative Research*, 3(3), 345-357.

Holloway, I. and Wheeler, S. (2013) *Qualitative research in nursing and healthcare*, Chicester, West Sussex: John Wiley & Sons.

Holton, J.A. (2007) 'The coding process and its challenges' in Bryant, A. and Charmaz, K., eds., *The SAGE handbook of grounded theory*, London: SAGE Publications, (Part III), 265-89.

Hopkins, N. (1999) 'MIT and gender bias: following up on victory', *The Chronicle of Higher Education*, 45(40), B4-B5.

Hunt, D.M. and Michael, C. (1983) 'Mentorship: a career training and development tool', *Academy of Management Review*, 8(3), 475-485.

Isabella, L.A. (1990) 'Evolving interpretations as a change unfolds: how managers construe key organizational events', *Academy of Management Journal*, 33(1), 7-41.

Jacob, H.S. (1997) 'Mentoring: The forgotten fourth leg of the academic stool', *Journal of Laboratory and Clinical Medicine*, 129(5), 486.

Janssen, S., Tahitu, J., van Vuuren, M. and de Jong, M.D. (2016) 'Coworkers' perspectives on mentoring relationships', *Group & Organization Management*, 43 (2), 245–272.

Janssen, S., Van Vuuren, M. and De Jong, M.D. (2014) 'Motives to mentor: self-focused, protégé-focused, relationship-focused, organization-focused, and unfocused motives', *Journal of Vocational Behavior*, 85(3), 266-275.

Ferreday, J. and Muir-Cochrane, E. (2006) 'Demonstrating rigor using thematic analysis: a hybrid approach of inductive and deductive coding and theme development', *International Journal of Qualitative Methods*, 5(1), 80-92, available: http://dx.doi.org/10.1177/160940690600500107.

Johnson, W.B. (2007) *On being a mentor: a guide for higher education faculty*, Mahwah, NJ: Lawrence Erlbaum Associates Publishers.

Johnson, W.B. (2015) *On being a mentor: a guide for higher education faculty*, 2nd ed., New York: Routledge.

Kammeyer-Mueller, J.D. and Judge, T.A. (2008) 'A quantitative review of mentoring research: test of a model', *Journal of Vocational Behavior*, 72(3), 269-283.

Kang, S.C., Snell, S.A. and Swart, J. (2012) 'Options-based HRM, intellectual capital, and exploratory and exploitative learning in law firms' practice groups', *Human Resource Management*, 51(4), 461-485.

Kanter, R.M. (1977) *Men and women of the corporation*, New York: Basic Books.

Karmiloff-Smith, A. (1992) *Beyond modularity: a developmental perspective on cognitive science, learning, development, and conceptual change series,* Cambridge, Massachusetts: MIT Press.

Keen, J. and Packwood, T. (1995) 'Qualitative research: case study evaluation', *BMJ*, 311(7002), 444-446.

King, N. (2004)) Using interviews in qualitative research' in Cassell, C. and Symon, G., eds., *Essential guide to qualitative methods in organizational research*, London: SAGE Publications, 11-22.

Kitzinger, J. and Barbour, R. (1999) *Developing focus group research: politics, theory and practice*, Thousand Oaks, California: SAGE Publications.

Kram, K.E. (1983) 'Phases of the mentor relationship', *Academy of Management Journal*, 26(4), 608-625.

Kram, K.E. (1985) 'Improving the mentoring process', *Training and Development Journal,* 39(4) 40,42-43.

Kram, K.E. (1988) *Mentoring at work: developmental relationships in organizational life*, Lanham, Maryland: University Press of America.

Kram, K.E. and Isabella, L.A. (1985) 'Mentoring alternatives: the role of peer relationships in career development', *Academy of Management Journal*, 28(1), 110-132.

Krippendorff, K. (2004) *Content analysis: An introduction to its methodology*, 2nd ed., Thousand Oaks, California: SAGE Publications.

Krippendorff, K. (2004) 'Reliability in content analysis', *Human Communication Research*, 30(3), 411-433.

Krueger, R.A. and Casey, M.A. (1994) *Focus groups: A practical guide for applied research*, 2nd ed., Thousand Oaks, California: 53-73.

Lam, A. (2000) 'Tacit knowledge, organizational learning and societal institutions: an integrated framework', *Organization Studies*, 21(3), 487-513.

Lankau, M.J. and Scandura, T.A. (2002) 'An investigation of personal learning in mentoring relationships: content, antecedents, and consequences', *Academy of Management Journal*, 45(4), 779-790.

Larkin, M., Watts, S. and Clifton, E. (2006) 'Giving voice and making sense in interpretative phenomenological analysis', *Qualitative Research in Psychology*, 3(2), 102-120.

Lasswell, H.D. (1946) 'Describing the contents of communications' in Smith, B.L., Casey, R.D. and Lasswelland, H.D., eds., *Propaganda, communication and public opinion*, Princeton, NJ: Princeton University Press, 74-94.

Lawrie, J. (1987) 'How to establish a mentoring program', *Training and Development Journal,* 41(3), 25-27.

Lee Endres, M., Endres, S.P., Chowdhury, S.K. and Alam, I. (2007) 'Tacit knowledge sharing, self-efficacy theory, and application to the Open Source community', *Journal of Knowledge Management*, 11(3), 92-103.

Lee, L.L. (2000) 'Knowledge sharing metrics for large organizations' in Thuraisingham, B.M., Maybury, M. and Morey, D., eds., *Knowledge management: classic and contemporary works*, Cambridge, Massachusetts: MIT Press, 403-419.

Leech, N.L. and Onwuegbuzie, A.J. (2011) 'Beyond constant comparison qualitative data analysis: using NVivo', *School Psychology Quarterly*, 26(1), 70.

Leedy, P. (1989) *Practical research: planning and design*, New York, NY: Macmillan.

Lillis, A.M. (1999) 'A framework for the analysis of interview data from multiple field research sites', *Accounting & Finance*, 39(1), 79-105.

Lin, C.P. (2007) 'To share or not to share: modeling tacit knowledge sharing, its mediators and antecedents', *Journal of Business Ethics*, 70(4), 411-428.

Lincoln, Y.S. and Guba, E.G. (2000) 'The only generalization is: there is no generalization' in Gomm, R., Hammersley, M. and Foster, P., eds., *Case study method* London: SAGE Publications, 27-44.

Marshall, C. and Rossman, G.B. (2014) *Designing qualitative research*, Thousand Oaks, California: SAGE Publications.

Martin, P.Y. and Turner, B.A. (1986) 'Grounded theory and organizational research', *The Journal of Applied Behavioral Science*, 22(2), 141-157.

Mathews, P. (2003) 'Academic mentoring enhancing the use of scarce resources', *Educational Management & Administration*, 31(3), 313-334.

Mavrinac, M.A. (2005) 'Transformational leadership: peer mentoring as a values-based learning process', *portal: Libraries and the Academy*, 5(3), 391-404.

Maykut, P. and Morehouse, R. (1994) *Beginning qualitative research: a philosophic and practical guide*, Bristol, PA: Falmer.

McCracken, G. (1988) *The long interview*, Thousand Oaks, California: SAGE Publications.

McKeen, C.A. and Burke, R.J. (1989) 'Mentor relationships in organisations: issues, strategies and prospects for women', *Journal of Management Development*, 8(6), 33-42.

McNeer, E.J. (1983) 'Two opportunities for mentoring: a study of women's career development in higher education administration', *Journal of the National Association of Women Deans and Counselors*, 47(1), 8-14.

Megginson, D. (1994) 'What's happening in mentoring research', in *European Mentoring Centre Conference*, Sheffield Business School.

Megginson, D. and Clutterbuck, D. (1995) *Mentoring in action*, London: Kogan Page.

Melillo, D. (1981) *Role model and mentor influences on the career development of academic women*, Ann Arbor, Michigan: University Microfilms International.

Merriam, S. (1983) 'Mentors and protégés: a critical review of the literature', *Adult Education Quarterly*, 33(3), 161-173.

Merriam, S.B., Thomas, T.K. and Zeph, C.P. (1987) 'Mentoring in higher education: what we know now', *The Review of Higher Education*, 11(2), 199.

Messmer, M. (1998) 'Mentoring: building your company's intellectual capital', *HR Focus*, 75(9), S11-S12.

Meyer, C.B. (2001) 'A case in case study methodology', *Field Methods*, 13(4), 329-352.

Miles, M.B. (1979) 'Qualitative data as an attractive nuisance: the problem of analysis', *Administrative Science Quarterly*, 24(4), 590-601.

Miles, M.B. and Huberman, A.M. (1994) *Qualitative data analysis: an expanded sourcebook*, Thousand Oaks, California: SAGE Publications.

Miller, R.L. and Brewer, J.D. (2003) *The AZ of social research: a dictionary of key social science research concepts*, London: GE Publications, doi, 10(4135), 9780857020024.

Mintzberg, H. (1979) 'An emerging strategy of "direct" research', *Administrative Science Quarterly*, 24(4), 582-589.

Mohd Rasdi, R., N. Garavan, T. and Ismail, M. (2013) 'Networking behaviours and managers' career success in the Malaysian public service: the moderating effect of gender', *Personnel Review*, 42(6), 684-703.

Moore, K. and Salimbene, A.M. (1981) 'The dynamics of the mentor-protege relationship in developing women as academic leaders', *Journal of Educational Equity and Leadership*, 2(5), 1-64.

Moore, K.M. (1982) 'The role of mentors in developing leaders for academe', *Educational Record*, 63(1), 22-28.

Morgan, G. and Smircich, L. (1980) 'The case for qualitative research', *Academy of Management Review*, 5(4), 491-500.

Mowday, R.T., Steers, R.M. and Porter, L.W. (1979) 'The measurement of organizational commitment', *Journal of Vocational Behavior*, 14(2), 224-247.

Näslund, D. (2002) 'Logistics needs qualitative research – especially action research', *International Journal of Physical Distribution & Logistics Management*, 32(5), 321-338.

Nelson, R.R. and Winter, S.G. (2009) *An evolutionary theory of economic change*, Cambridge, Massachusetts: Harvard University Press.

Nielson, T.R., Carlson, D.S. and Lankau, M.J. (2001) 'The supportive mentor as a means of reducing work-family conflict', *Journal of Vocational Behavior*, 59(3), 364-381.

Nishida, K. (1990) *An inquiry into the good*, translated by Abe, M. and Ives, C., New Haven: Yale University Press.

Nolan, C.T. and Garavan, T.N. (2016) 'Human resource development in SMEs: a systematic review of the literature', *International Journal of Management Reviews*, 18(1), 85-107.

Nonaka, I. (1991) 'The knowledge-creating company', *Harvard Business Review*, 69(6), 96-104.

Nonaka, I. (1994) 'A dynamic theory of organizational knowledge creation', *Organization Science*, 5(1), 14-37.

Nonaka, I. and Konno, N. (1998) 'The concept of "ba": Building a foundation for knowledge creation', *California Management Review*, 40(3), 40-54.

Nonaka, I., Reinmoeller, P. and Senoo, D. (1998) 'The art of knowledge: systems to capitalize on market knowledge', *European Management Journal*, 16(6), 673-684.

Nonaka, I. and Takeuchi, H. (1995) *The knowledge-creating company: How Japanese companies create the dynamics of innovation*, New York, NY: Oxford University Press.

Nonaka, I. and Takeuchi, H. (2001) 'Organizational knowledge creation', *Creative Management,* London: SAGE Publications*,* 64-82.

Nonaka, I., Toyama, R. and Konno, N. (2000) 'SECI, ba and leadership: a unified model of dynamic knowledge creation', *Long Range Planning*, 33(1), 5-34.

Nonaka, I. and Von Krogh, G. (2009) 'Perspective—tacit knowledge and knowledge conversion: controversy and advancement in organizational knowledge creation theory', *Organization Science*, 20(3), 635-652.

OECD (2017) *Education at a glance 2017: OECD indicators*, available: http://dx.doi.org/10.1787/eag-2017-en [accessed 3 April 2018].

Onwuegbuzie, A.J., Leech, N.L. and Collins, K.M. (2012) 'Qualitative analysis techniques for the review of the literature', *The Qualitative Report*, 17(28), 1.

Palmer, R.E (1969) *Hermeneutics: interpretation theory in Schleiermacher, Dilthey, Heidegger, and Gadamer,* Evanston: Northwestern University Press.

Parsloe, E. (1992) *Coaching, mentoring, and assessing: a practical guide to developing competence*, New York, NY: Nichols Publishing Company.

Patton, M.Q. (1999) 'Enhancing the quality and credibility of qualitative analysis', *Health Services Research*, 34(5), 1189-1208.

Patton, M.Q. (2002) *Qualitative research and evaluation methods*, Thousand Oaks: SAGE Publications.

Polanyi, M. (1966) 'The logic of tacit inference', *Philosophy*, 41(155), 1-18.

Polanyi, M. (1966) *The tacit dimension*, London: Routledge & Kegan Paul.

Polanyi, M. (1967) *The tacit dimension*, Garden City, NY: Anchor Books.

Polanyi, M. (1997) 'Tacit knowledge' in Prusak, L., ed., *Knowledge in organizations*, Boston: Butterworth-Heinemann, 135-146.

Pololi, L. and Knight, S. (2005) 'Mentoring faculty in academic medicine', *Journal of General Internal Medicine*, 20(9), 866-870.

Popper, K.R. (1972) *Objective knowledge: an evolutionary approach,* Oxford: Clarendon Press.

Pringle, J., Drummond, J., McLafferty, E. and Hendry, C. (2011) 'Interpretative phenomenological analysis: a discussion and critique', *Nurse Researcher*, 18(3), 20-24.

Putnam, R.D. (1995) 'Bowling alone: America's declining social capital', *Journal of Democracy*, 6(1), 65-78.

QDA Training, 2016 B. *Day 2 - Nvivo Underway: Analysing your Data.* Dublin: QDA Training.

Queralt, M. (1982) *The role of the mentor in the career development of university faculty members and academic administrators*, Florida: Eric.

Rabiee, F. (2004) 'Focus-group interview and data analysis', *Proceedings of the Nutrition Society*, 63(04), 655-660.

Ragins, B.R. (1989) 'Barriers to mentoring: the female manager's dilemma', *Human Relations*, 42(1), 1-22.

Ragins, B.R. (1999) 'Where do we go from here, and how do we get there? Methodological issues in conducting research on diversity and mentoring relationships' in Murell, A.J., Crosby, F.J. and Ely, R.J, eds., *Mentoring dilemmas: developmental relationships within multicultural organizations*, Hoboken: Taylor and Francis, 211-229.

Ragins, B.R. (2016) 'From the ordinary to the extraordinary: high-quality mentoring relationships at work', *Organizational Dynamics*, 45(3), 228-244.

Ragins, B.R., Cotton, J.L. and Miller, J.S. (2000) 'Marginal mentoring: the effects of type of mentor, quality of relationship, and program design on work and career attitudes', *Academy of Management Journal*, 43(6), 1177-1194.

Ragins, B.R. and Kram, K.E. (2007) *The handbook of mentoring at work: theory, research, and practice*, Thousand Oaks, California: SAGE Publications.

Ragins, B.R. and Sundstrom, E. (1989) 'Gender and power in organizations: a longitudinal perspective', *Psychological Bulletin*, 105(1), 51.

Ragins, B.R. and Verbos, A.K. (2007) 'Positive relationships in action: relational mentoring and mentoring schemas in the workplace' in Dutton, J.E. and Ragins, B.R., eds., *Exploring positive relationships at work: building a theoretical and research foundation*, Mahwah, NJ: Lawrence Erlbaum Associates, 91-116.

Ramaswami, A. and Dreher, G.F. (2007) 'The benefits associated with workplace mentoring relationships' in Allen, T.D. and Eby, L.T., eds., *The Blackwell handbook of mentoring: a multiple perspectives approach*, Oxford: Blackwell Publishing, 211.

Ray, T. (2009) 'Rethinking Polanyi's concept of tacit knowledge: from personal knowing to imagined institutions', *Minerva*, 47(1), 75-92.

Reece, B.L. and Brandt, R. (1999) *Effective human relations in organizations*, 7th ed., Boston: Houghton Mifflin College Division.

Remenyi, D., Williams, B., Money, A. and Swartz, E., (1999) *Doing research in business and management: an introduction to processes and method,* Boston: Houghton Mifflin.

Liamputtong, P. and Ezzy, D. (1999) *Qualitative research methods: A health focus,* Oxford: Oxford University Press.

Richards, T.J. and Richards, L. (1994) 'Using computers in qualitative research' in Denzin, N.K. and Lincoln, Y.S., eds., *Handbook of qualitative research*, Thousand Oaks, California: SAGE Publications, 445-62.

Rios, A. and Longnion, J. (2000) 'Agenda for the 21st century: executive summary', *Minneapolis: University of Minnesota, National Initiative for Women in Higher Education. Retrieved September*, 7, 2000.

Roch, G. (1978) 'Much ado about mentors', *Harvard Business Review*, 57(1), 14-20.

Rock, A.D. and Garavan, T.N. (2011) 'Understanding the relational characteristics of effective mentoring and developmental relationships at work' in Poell, R.F. and van Woerkom, M., eds., *Supporting workplace learning*, New York, NY: Springer, 107-127.

Russell, J.E. and Adams, D.M. (1997) 'The changing nature of mentoring in organizations: an introduction to the special issue on mentoring in organizations', *Journal of Vocational Behavior*, 51(1), 1-14.

Sambunjak, D., Straus, S.E. and Marušić, A. (2006) 'Mentoring in academic medicine: a systematic review', *Jama*, 296(9), 1103-1115.

Sanchez, R. (2005) 'Tacit knowledge versus explicit knowledge: approaches to knowledge management practice', *TEAM LinG*, 191.

Sands, R.G., Parson, L.A. and Duane, J. (1991) 'Faculty mentoring faculty in a public university', *The Journal of Higher Education*, 62(2), 174-193.

Saunders, M., Lewis, P. and Thornhill, A. (2007) *Research methods for business students*, 4th ed., Harlow, Essex: Pearson Education.

Saunders, M., Lewis, P. and Thornhill, A. (2009) *Research methods for business students*, 5th ed., Harlow, Essex: Pearson Education.

Saunders, M.N., Saunders, M., Lewis, P. and Thornhill, A. (2011) *Research methods for business students,* 5th ed., Harlow, Essex, Pearson Education.

Saunders, M.N. and Thornhill, A. (2003) 'Organisational justice, trust and the management of change: an exploration', *Personnel Review*, 32(3), 360-375.

Scandura, T.A. (1992) 'Mentorship and career mobility: an empirical investigation', *Journal of Organizational Behavior*, 13(2), 169-174.

Scandura, T.A. and Ragins, B.R. (1993) 'The effects of sex and gender role orientation on mentorship in male-dominated occupations', *Journal of Vocational Behavior*, 43(3), 251-265.

Scandura, T.A., Tejeda, M.J., Werther, W.B. and Lankau, M.J. (1996) 'Perspectives on mentoring', *Leadership & Organization Development Journal*, 17(3), 50-56.

Scandura, T.A. and Williams, E.A. (2001) 'An investigation of the moderating effects of gender on the relationships between mentorship initiation and protégé perceptions of mentoring functions', *Journal of Vocational Behavior*, 59(3), 342-363.

Scandura, T.A. and Williams, E.A. (2004) 'Mentoring and transformational leadership: the role of supervisory career mentoring', *Journal of Vocational Behavior*, 65(3), 448-468.

Scarbrough, H. (1999) 'Knowledge as work: conflicts in the management of knowledge workers', *Technology Analysis & Strategic Management*, 11(1), 5-16.

Schuller, T. (2017) *The Paula principle: How and why women work below their level of competence*, London: Scribe Publications.

Seibert, S. (1999) 'The effectiveness of facilitated mentoring: A longitudinal quasi-experiment', *Journal of Vocational Behavior*, 54(3), 483-502.

Shamsie, J. and Mannor, M.J. (2013) 'Looking inside the dream team: probing into the contributions of tacit knowledge as an organizational resource', *Organization Science*, 24(2), 513-529.

Shimizu, H. (1995) 'Ba-principle: new logic for the real-time emergence of information', *Holonics*, 5(1), 67-79.

Singh, V., Bains, D. and Vinnicombe, S. (2002) 'Informal mentoring as an organisational resource', *Long Range Planning*, 35(4), 389-405, available: http://dx.doi.org/http://dx.doi.org/10.1016/S0024-6301(02)00064-X.

Smith, J.A., Flowers, P., & Larkin, M. (2009). *Interpretative phenomenological analysis: theory, method and research'.* Thousand Oaks, California: SAGE Publications.

Smith, H.A. and McKeen, J.D. (2003) 'Instilling a knowledge-sharing culture', *Queen's Centre for Knowledge-Based Enterprises*, 20(1), 1-17.

Smith, J.A. (1996) 'Beyond the divide between cognition and discourse: using interpretative phenomenological analysis in health psychology', *Psychology and Health*, 11(2), 261-271.

Smith, J.A. (2015) *Qualitative psychology: a practical guide to research methods*, Thousand Oaks, California: SAGE Publications.

Smith, J.O., Whitman, J.S., Grant, P.A., Stanutz, A., Russett, J. and Rankin, K. (2001) 'Peer networking as a dynamic approach to supporting new faculty', *Innovative Higher Education*, 25(3), 197-207.

The British Psychological Society (2014) *Code of human research ethics,* 2nd ed.*,* Leicester: British Psychological Society.

Sorcinelli, M.D. and Yun, J. (2007) 'From mentor to mentoring networks: mentoring in the new academy', *Change: The Magazine of Higher Learning*, 39(6), 58-61.

Sosik, J.J. and Godshalk, V.M. (2000) 'The role of gender in mentoring: implications for diversified and homogenous mentoring relationships', *Journal of Vocational Behavior*, 57(1), 102-122.

Sosik, J.J. and Lee, D.L. (2002) 'Mentoring in organizations: a social judgment perspective for developing tomorrow's leaders', *Journal of Leadership & Organizational Studies*, 8(4), 18.

Swart, J. and Kinnie, N. (2010) 'Organisational learning, knowledge assets and HR practices in professional service firms', *Human Resource Management Journal*, 20(1), 64-79.

Swart, J., Kinnie, N., Rossenberg, Y. and Yalabik, Z.Y. (2014) 'Why should I share my knowledge? A multiple foci of commitment perspective', *Human Resource Management Journal*, 24(3), 269-289.

Swart, J. and Pye, A. (2002) 'Conceptualising organizational knowledge as collective tacit knowledge: a model of redescription', in *Third European Conference on Organizational Knowledge, Learning and Capabilities*, Athens, Greece, 5-6.

Sweeney, T. (2017) 'The Paula principle: why women are still banging their heads on the glass ceiling ', *Irish Independent,* available: https://www.independent.ie/life/the-paula-principle-why-women-are-still-banging-their-heads-on-the-glass-ceiling-35601316.html

Thomas, G. and James, D. (2006) 'Reinventing grounded theory: some questions about theory, ground and discovery', *British Educational Research Journal*, 32(6), 767-795.

Thomas, J. and Harden, A. (2008) 'Methods for the thematic synthesis of qualitative research in systematic reviews', *BMC Medical Research Methodology*, 8(1), 45.

Thornberg, R. (2012) 'Informed grounded theory', *Scandinavian Journal of Educational Research*, 56(3), 243-259.

Toffler, A. (1990) *Powershift: knowledge, wealth, and violence at the edge of the 21st century,* New York: Bantam.

Tymon, W.G. and Stumpf, S.A. (2003) 'Social capital in the success of knowledge workers', *Career Development International*, 8(1), 12-20.

University of Limerick (2015) 'Broadening Horizons: University of Limerick strategic plan 2015-2019'. Available: http://www.ul.ie/UL-Strategic-Plan-Broadening-Horizons.pdf [accessed 3 April 2018].

Van den Hooff, B. and De Ridder, J.A. (2004) 'Knowledge sharing in context: the influence of organizational commitment, communication climate and CMC use on knowledge sharing', *Journal of Knowledge Management*, 8(6), 117-130.

Von Krogh, G., Ichijo, K. and Nonaka, I. (2000) *Enabling knowledge creation: How to unlock the mystery of tacit knowledge and release the power of innovation*, Oxford: Oxford University Press on Demand.

Vries, J.d., Webb, C. and Eveline, J. (2006) 'Mentoring for gender equality and organisational change', *Employee Relations*, 28(6), 573-587.

Wagstaff, C., Jeong, H., Nolan, M., Wilson, T., Tweedlie, J., Phillips, E., Senu, H. and Holland, F. (2014) 'The accordion and the deep bowl of spaghetti: eight researchers' experiences of using IPA as a methodology', *The Qualitative Report*, 19(24), 1.

Wanberg, C.R., Welsh, E.T. and Hezlett, S.A. (2003) 'Mentoring research: a review and dynamic process model' in Martocchio, J.J. and Liao, H., eds., *Research in personnel and human resources management*, Bingley, West Yorkshire: Emerald Group Publishing Limited, 39-124.

Watzlawick, P. (1976) *How real is real? Communication, disinformation, confusion*, New York: Random House.

Webb, C. and Kevern, J. (2001) 'Focus groups as a research method: a critique of some aspects of their use in nursing research', *Journal of Advanced Nursing*, 33(6), 798-805.

Wiles, R., Crow, G., Heath, S. and Charles, V. (2008) 'The management of confidentiality and anonymity in social research', *International Journal of Social Research Methodology*, 11(5), 417-428.

Wiles, R., Crow, G. and Pain, H. (2011) 'Innovation in qualitative research methods: a narrative review', *Qualitative Research*, 11(5), 587-604.

Wilkesmann, U., Fischer, H. and Wilkesmann, M. (2009) 'Cultural characteristics of knowledge transfer', *Journal of Knowledge Management*, 13(6), 464-477.

Wilkinson, S. (2000) 'Women with breast cancer talking causes: comparing content, biographical and discursive analyses', *Feminism & Psychology*, 10(4), 431-460.

Wirth, L. (2001), *Breaking Through the Glass Ceiling*, International Labour Office: Geneva.

Woodd, M. (1997) 'Mentoring in further and higher education: learning from the literature', *Education + Training*, 39(9), 333-343.

Wunsch, M.A. (1994) *Mentoring revisited: making an impact on individuals and institutions*, San Francisco: Jossey-Bass.

Yin, R.K. (1994) 'Case study research: design and methods. applied social research methods series, 5', *Biography,* London: SAGE Publications.

Yin, R.K. (2013) *Case study research: design and methods*, Thousand Oaks, California: SAGE Publications.

Young, A.M. and Perrewé, P.L. (2000) 'The exchange elationship between mentors and protégés: the development of a framework', *Human Resource Management Review*, 10(2), 177-209, available: http://dx.doi.org/http://dx.doi.org/10.1016/S1053-4822(99)00045-5.

Young, C.J., MacKenzie, D.L. and Sherif, C.W. (1980) 'In search of token women in academia', *Psychology of Women Quarterly*, 4(4), 508-525.

Zack, M.H. (1999) 'Developing a knowledge strategy', *California Management Review*, 41(3), 125-145.

Zellers, D.F., Howard, V.M. and Barcic, M.A. (2008) 'Faculty mentoring programs: reenvisioning rather than reinventing the wheel', *Review of Educational Research*, 78(3), 552-588.

Appendices

Appendix 1: Mentoring scheme – outline of training

1. Outline of training for mentors

What is mentoring?	• Difference between coaching and mentoring as a development tool • Why mentoring is used and when it is used
Why be a mentor?	• What is in it for you? • What are you committing to as a mentor?
Who should mentor?	
Role of the mentor and the mentee?	
The dimensions of the mentor's role	
Mind set required to be a mentor	• What are the key criteria to be an effective mentor? • How do you meet these criteria?
Boundaries of the role of the mentor	• What is appropriate to deal with in a mentoring relationship? • What is outside the boundaries of the relationship? • Other facilities available if the mentee needs personal support that is outside the remit of the mentoring relationship
The mentoring process	• Setting up an initial mentoring partnership – the matching process. How exactly this will happen in …? • The mentoring contract – what should it involve? • Frequency of mentor meetings? • Venues for a mentoring engagement?
The first meeting between mentors and mentees	• Structure for the initial meeting • Ideal agenda • How long the initial meeting should last
Following meetings	• What should be the agenda for following meetings?
Using models of reflective space in your mentoring meetings	• Why use a model to help the effectiveness of mentoring interactions? • How to use the model
Understanding learning styles	• Identify your own learning style • How would your learning style influence how you might engage in the mentoring arrangement?
An exploration of the skills required by a mentor	• Ability to build rapport • Being non-judgemental • Being candid and challenging • Communication • Listening • Feedback • Questioning • Problem solving • Ability to work from other's agendas • Giving encouragement and support • Focus on the consequences of actions
What can go wrong	What can go wrong in mentoring relationships and how to deal with this if it does happen
Planning for success	Planning for success in your mentoring partnerships in the future.

2. Outline of training for mentees

There are two parts to the session. The first part is aimed at looking at mentoring generally and exploring what is necessary to make the relationship work and deliver for the mentee.

The second part of the session (the afternoon) is aimed at addressing individual concerns/questions that participants may have about the mentoring partnerships that they are about to embark on. We will also look at what they need to do individually to make sure that the process is successful for them, in that it addresses the issues that they wanted to have addressed.

Due to the individual nature of the afternoon session, we propose that each person will have a 20- to 30-minute session with the facilitator to address any questions the person may have. They will also receive advice on what they can do personally to maximise the opportunity that the mentoring process offers to them. Each person who wishes to avail of this one-on-one time with the facilitator will be allocated a 30-minute slot in the afternoon.

Morning Session Content:

What is mentoring?	Difference between coaching and mentoring as a development tool Why mentoring is used and when it is used
What are the issues that you can use mentoring for?	The type of issues that are appropriate to deal with in a mentoring relationship. What is outside the remit of a mentoring relationship
Role of the mentor and the mentee?	The mentee leading of the mentoring process – how does this happen? What are the responsibilities of the mentor? What you want from a mentor – the dimensions of the role What are the responsibilities of you as mentee?
The mentoring process	Setting up an initial mentoring partnership – how that is going to happen The mentoring contract – what should be included? Frequency of mentor meetings? Venues for a mentoring engagement
The first meeting between mentors and mentees	Structure for the initial meeting Ideal agenda How long the initial meeting should last
An exploration of the skills required by a mentee to make process work	Communication Listening Questioning Feedback – giving and receiving
What can go wrong?	What can go wrong in mentoring relationships and how to deal with this if it does happen
Planning for success	Planning for success in your mentoring

partnerships in the future.

Appendix 2: Mentoring focus group report

Conducted: 27th January 2016

By: Marie Connolly (Organisational Change Manager)

Aim: To review the mentoring scheme from both mentor and mentee perspective. The main aim of the focus group was to broadly test the questions to be put to individual mentors and mentees. To uncover participant's views with regard to their experiences of the scheme, the level of training provided as part of it, the format and duration of the mentoring process and the overall outcomes of the process.

Format: The focus group was conducted over a one hour period consisting of a brief presentation provided by the Mentoring Scheme Coordinator followed by a facilitated discussion with the attendees. In total there were 12 individuals in attendance (7 women and 5 men). The group included individuals who had previously acted as Mentors and individuals who have been through the mentoring process as mentees. In addition, there were some individuals who had no experience of a formal mentoring scheme but who had engaged in informal mentoring (either as a mentor or mentee) and were able to provide additional insights.

The focus group questions

Purpose of the question	Focus group question
Experience with formal mentoring The role of mentoring, formal versus informal mentoring and mentoring responsibility	**Q.** Within the group how many of you have direct experience with the Formal Mentoring Scheme – as mentors? As mentees? **Q.** How would you rate that experience?
Volunteering to become a mentor Why are mentors prepared to sacrifice their time and their energies in order to support and assist others for no apparent tangible rewards? The social exchange view – 'element of reciprocity'?	**Q.** Why did you volunteer? **Q.** Is the process of volunteering to become a mentor effective? How do you think this might be improved? **Q.** Did acting as a mentor enhance your own career in any way? **Q.** What development if any did you experience personally from acting as a mentor?

The matching process	**Q.** What is your experience with the process? **Q.** Do you thinking the process is good and if not how might it be improved?
Trust The establishment of trust and empathy and the quality of the trust established is also critical to the success of the mentoring relationship The 'ba', the socialisation aspect, must be right for effective mentoring to take place	**Q.** How important was confidentiality to you as a mentor/mentee? **Q.** As the Formal Mentoring Scheme matches mentors and mentees from different departments do you feel mentees should be required to notify their head of department/manager that they have a mentor and who that mentor is?
Mentoring and knowledge Mentoring relationships, it is deemed, can provide mentees with important opportunities for learning and insights 'Mentoring is a powerful form of knowledge creation that delivers new ideas to organisations'	**Q.** What type of learning, knowledge transfer if any took part in your mentoring relationships? **Q.** Was this of value to you?
	Q. What was the key learning outcome of your experience?
Tacit knowledge The importance of tacit knowledge in organisation learning has become the focus of considerable attention in recent literature. The creation and transfer of tacit knowledge within mentoring plays a key role	**Q.** Can you give any examples of the transfer of tacit knowledge between you and your mentor? **Q.** What did you do with this knowledge? **Q.** Did this knowledge turn at any stage from tacit to implicit knowledge?
Outcomes Having a mentor has been related to job and career satisfaction, concluding that overall mentoring and 'career mentoring' are strong predictors of career success and therefore as a result of mentoring mentees are successful in securing promotion, increasing salary	**Q.** Has involvement in the Mentoring Scheme resulted in any tangible or intangible outcomes for you as a mentor or mentee?

Overview

The formal Mentoring Scheme has been in place since its inception in 2007 upon acquiring Atlantic Philanthropies funding for the initiative. The aim of the initiative is to provide a platform through which experiences can be shared on a one to-one informal basis, thus providing support to people at various stages in their careers. This sits in addition to the other programmes in operation such as the Centre for Teaching and Learning and the Graduate Studies Office Mentoring Scheme who a framework for the mentoring of new faculty. The scheme is open to both academic and support staff, of which the take up of the scheme was roughly equal amongst. However, the scheme is now 70 percent academics and 30 percent support staff.

The aim of this mentoring initiative is to provide a platform through which experiences can be shared on a one to-one informal basis, thus providing support to people at various stages in their careers. The Centre for Teaching and Learning and the Graduate Studies Office Mentoring Scheme provides a framework for the mentoring of new faculty and researchers.

This scheme was initially administered by the Mentoring Committee, a subgroup of the Women's' Forum. An open call is launched each year requesting mentors and mentees to sign up to the programme. The applications are then reviewed and matched by the Mentoring Co-ordinator. All Mentee-Mentor exchanges are strictly confidential. The matches are always outside of individuals own departments. A half day training workshop is provided to both mentors and mentees. Either can request not to continue the mentoring relationship if they choose.

Review Feedback

Experience of mentoring

The group were first asked about their mentoring experiences both as mentors and mentees. The group were largely unanimous in their support of mentoring as a concept generally. Some individuals had been through the process a number of times acting as mentor on several occasions and expressed that they had found sharing their career experiences with others an enriching and worthwhile experience. One individual highlighted that they had previously been involved in mentoring an individual who was in fact more senior than them (outside the formal scheme) and that while this was more task focused initially, it developed into a very positive experience. This is something that the mentoring scheme was not initially designed for as generally mentors are expected to be one career level/grade above the mentee. However, in the review of the scheme, a mentor/mentee match where this level/grade difference is not present might be something worth considering also.

The role of mentoring, formal versus informal mentoring and mentoring responsibility

A number of the attendees mentioned that their best mentoring experiences had come from mentors who were very close to them in a working relationship i.e within one's own department and particular field. The Mentoring Scheme expressly operates a partnering system outside of a mentees own department as mentoring and coaching is expected to be undertaken with new employees within their own departments. However, participants pointed out that the onus to provide mentoring at departmental level was not clear and was something which occurred more informally and/or adhoc on a department by department basis. In terms of launching the scheme, it would be advisable to include a greater emphasis within the communication of the scheme that this formal mentoring is additional to mentoring/coaching that is expected to be provided at department level. The responsibility to provide coaching and mentoring should be possibly highlighted more explicitly to heads of departments also to ensure that these activities are taking place.

In addition, some participants noted that there was significant overlap between a number of the schemes which operate within the University, for example between the formal mentoring programme and the research coaching programme. It is likely that this overlap is something more likely to affect research staff given the specific programmes offered by HR for researchers and the Graduate Studies/Research Office. However, it might be worth reviewing the content of the research coaching programme in tandem with the mentoring schemes half day training session to determine if a greater element of differentiation can be achieved.

Matching Process, Mentor Attributes and Confidentiality

There was a lengthy discussion of the effectiveness of the mentor/mentee matching process. There was unanimous agreement that the process should continue to remain confidential and that the information is not disclosed to heads of department is any of their staff are engaged in the process.

A discussion ensued on whether or not it would be useful to publish the profiles of mentors on the website thus allowing mentees to choose who they might like to be mentored by. This is something that could be considered.

Another suggestion was to look at a wider pool of mentors by aligning the scheme with another university, thus being more "externally focused".

Finally, in order to increase the number of mentors signing up for the scheme, it was suggested that in addition to the open call to sign up that the mentoring co-ordinator might also contact specific individuals across a variety of disciplines and areas of the university inviting them specifically to become a mentor. The group felt that this would be viewed as complimentary yet anyone who felt they were not suited to mentoring for any given reason e.g. time constraints could decline the invitation.

Training

Only a limited number of participants had actually attended the half day training programme on mentoring, but those that had were positive about it and felt it should be retained. Participants noted that possibly one of the best elements of the training was a synopsis of "what mentoring was not", as this set very clear boundaries for the mentor/mentee relationship on what each should expect from the process. Therefore a possible recommendation for the future re-launch would be to make this workshop compulsory i.e. every mentor (and mentee) should attend this workshop at least once before engaging in mentoring process.

Mentoring Duration and Timing

There were disparities between participants with regard to how long the mentoring pairing should run for. The current 12 month frame was considered too long by some, who felt that in some cases all that could be gained from the relationship could be achieved in one or two meetings. In contrast, others felt that the 12 month time frame was fine and that some pairs may in fact continue their mentoring relationships informally after that point.

Gender

With regard to gender the group were asked if the gender of the mentor/mentee mattered significantly. Again there was disparity within the group within regard to this. Some females in the group argued that many females will often want a female mentor as much of their queries may relate to the ability to balance career and family demands. In contrast, others argued that the gender should not matter and the aim should be find the best mentor possible for an individual who will be capable of giving them career insights, irrespective of gender.

A further point raised on gender was that the mentoring scheme in its current form seems less applicable to men. The reference to the Women's Forum in the handbook was cited as an indicator of this. In order to encourage a greater uptake among male mentees, some efforts should be taken to make the language and examples cited in the handbook more gender neutral perhaps.

Outcomes

While the participants noted that mentoring could be a very positive process, not all participants felt that the process had played a direct role in career outcomes, however they did accept that the knowledge gained in the process had been helpful. There were two participants, one mentor and one mentee who iterated that the mentoring process had most definitely played a crucial role in at least one promotion and in securing one competitive funding bid.

The mentoring application process

An aim of the focus group was to determine what actions could be taken to encourage a greater taken up on the mentoring scheme in the future. Some very worthwhile

suggestion was made. The first of these related to the timing of the scheme. Participants felt that a September call was less effective than a mid-semester as that time of year was often dominated by module preparation, conferences etc and that given the 12 month period of mentoring, a September start meant that the summer months were somewhat lost. The group felt that running a call mid semester either Oct/Nov or Feb/Mar would be preferable and likely to have greater take up.

Another good point made related to the format of the application form. Some individuals felt that the form requested too much information with regard to the reasons for applying for mentor (e.g feeling isolated at work) and on martial/family status that some people might find off putting. It was suggested that the form be condensed. More information could be provided informally through a conversation with the mentoring co-ordinator.

Finally, in order to increase take up it was suggested that some positive life stories of case studies of the mentoring experience be created and placed on the web page so that individuals can see real life examples of how mentoring benefited others.

With regard to publicity, a number of the participants noted that there needed to be more communication of the scheme within the university, perhaps through the induction programme as many individual are unaware of its existence. While all the policies are available on the HR website, other avenues could be explored to increase awareness. Perhaps inclusion of reference to mentoring when promotions calls are made might be possible?

Appendix 3: Mentoring and trust

Theme	Evidence – Verbatim responses from research participants	Sub-theme	ID
Trust	*"I would have shared personal anecdotes and personal experiences with them along the way but all of the time pointing out that they were my experiences and that theirs will be dependent on themselves and on the context in which they find themselves. But yeah definitely I would have shared experience, my own experiences with them*. Y*es it was just a confidential, a really confidential conversation that, that was it. I never told anybody I'm a mentor for her, you know. And as far as I'm aware, nobody else was aware that I was a mentor for her either."*	Confidentiality	MR2
	"And you know it took the mentee I think three or four meetings with myself for them to build up the trust with me, one particular lady I think she thought that whatever she told me it was going back to her line manager. It took me a few sessions to build up that trust and to ensure that she knew that this was 100% cast-iron confidential".	Building rapport and Trust	MR12
	"Personal issues do come up, they don't, they don't publicly say what they have discussed, you know, with me and they know it's confidential and things like that but they are putting a lot of trust in you and I suppose they're hoping for good advice where that may not be the case.	Openness	MR3
	"I think most mentors would, hopefully would have enough common sense apart from anything else to be aware of boundaries and not to cross inappropriate ones".	Setting Boundaries	MR5
	"I don't really think that trust building was, was an issue because I think due to the kind of very careful process of matching mentors and mentee I think the compatibility was there right from the start and so trust, trust was there rather than needed to be built"	Compatibility	ME8
	"Yes, yes I don't know why I did now but I did feel that she was someone who will keep a level of confidentiality around the process"	Confidentiality	ME1

Theme	Evidence – Verbatim responses from research participants	Sub-theme	ID
	I'll tell you what to do, it's sort of, it's a two way, so it's developing a rapport really, it kind of builds up the trust. To some extent it's got to be earned, you know, and obviously the people have got to trust you that you won't move around the place and it takes a while to build that, you know, that you're not going to go off and talk to a supervisor or their colleagues or their whatever, you know, that it is a genuine mentoring thing.	Building Rapport/ Trust	MR6
	But no I think it took a few sessions, it took about three or four meetings…But I think after that, the male/female relationship worked very, very well.	Building Trust	MR12
Trust	*But I, yea I do actually remember there was. There was information, like there as a sheet given out; it was something about the expectations of the relationship. And about the, so it was laid out quite clearly to me anyway. That this was a confidential as I wanted to make, you know that it was a confidential you know relationship. And that I only had to tell, not that I would say anything about what was discussed in the meeting.*	Building rapport and Trust	ME6
	I think most mentors would, hopefully would have enough common sense apart from anything else to be aware of boundaries and not to cross inappropriate ones	Boundaries	MR1
	I came in front of …. at an interview em I think she probably knows more about my weaknesses now from the mentoring scheme then she would know about any other candidates. That she would know what I am weak at you know she would know I am weak at networking and its valid I am you know she would know that those are not where I am strong. That I maybe I am not terribly assertive in that you know I am not so if I think that there is there is something there but it was for me the chances of my ever appearing in front of Sara at an interview. You know I weighed it up and thought there was more for me to gain than for me to lose but I do…	Trust	ME1
	I suppose to my mind like kind of sharing	Formal	MR12

Theme	Evidence – Verbatim responses from research participants	Sub-theme	ID
	about me and about my experience and background would be the way that I would like kind of try and, do you know, create a sense of trust so that someone knows who I am and, do you know, where I'm coming from, what my story is. But also I think like kind of that, you know, the formal like kind of like discussion document kind of in terms of starting off is very good because it allows someone like kind of to determine, I suppose to share as much as they are willing to share and like kind of put a plan together in terms of what they want to discuss so you know what the boundaries are.	Agreement	
	"very passionate about like kind of, especially around like kind of, you know, my interest and love of Italian and Italian teaching"	Compatibility	ME12
Trust	*"But one of the challenges is that it's hard to be well at …, if you don't have, feel that you're supported. Feel that you can be open and that there's, you know that there's. You know we talk about people you know, maybe stealing your ideas and all that. I mean that sort of thing; it's just crazy, for me and from my perspective. And if we're trying to achieve something you know that really has meaning. Then it should be a bit more open"*	Openness /Open Conversation	ME5
	Oh it would have, yeah, I would have shared personal anecdotes and personal experiences with them along the way but all of the time pointing out that they were my experiences and that theirs will be dependent on themselves and on the context in which they find themselves. But yeah definitely I would have shared experience, my own experiences with them.	Openness /Open Conversation	MR5
	But she was very carefully in relation I mean we never had a discussion about it but in terms of establishing trust I suppose it was that initially meeting where I felt we met on a level. You know in the sense that I knew she was a very senior person within the organisation but we had established some kind of connection	Establishment of Trust	ME2

Theme	Evidence – Verbatim responses from research participants	Sub-theme	ID
	beforehand. I was very clear about what I wanted it might have taken me a long time to tell her but like I was clear.		
	"You know there was trust in the relationship. And that anything that was discussed wouldn't be spoken about outside of that. So there were ground rules set, well I don't mean to sound now, ground rules. But I, yea I do actually remember there was. There was information, like there as a sheet given out; it was something about the expectations of the relationship"	Ground Rules	ME6
	"just a very open kind of supportive character, so again with the mentor it doesn't take long then if you're open as well to, to get that trust going, and I think the biggest thing for me was I felt he had my, my interests, not my interests, but like, it's almost the goodwill, I felt, you know, he genuinely would have liked to see me do well through the mentoring, so yeah, I thought it was a good intention and an open process, it kind of built fairly, fairly quickly, like every meeting we did have tended to go on for a long time, you know, it was kind of clear that it was, you know, he was very willing to give and, and very up for putting time in to it, he was a head of a department as well, so to get the time with him was really good"	Establishment of Trust	ME7

Appendix 4: Mentoring and gender

Theme	Evidence – Verbatim responses from research participants	Sub-theme	ID
Mentoring and Gender	*"I would have preferred a woman because I think a lot of issues that pertain to women in terms of progression, I think women are in a better place to kind of advice on that, at the time but I suppose now, having been here longer, I think I may now have more to learn from a male mentor actually in terms of how, I think how the different genders operate differently in terms of work".*	Support	ME10 (F)
	I wanted to have a female mentor. And the reason for that was because I wanted to see, I wanted to see what somebody else's perspective was on trying to manage and balance work and home. So that's why I wanted a female mentor and I really wanted somebody who had children but I couldn't say that on the form. So I was lucky enough that the mentor that I got was female and had children. But that's the reason why it was important.	Work life Balance	ME10 (F)
	I know at this stage of my career that's something that I've kind of learned the hard way and I think that it would just be, I would like to get the perspective of a man I think in that area.	Men as mentors	ME10 (F)
	I've seen a lot of issues arise within departments because of emotions or, you know, people taking things personally and I think a lot of men are much better equipped to kind of draw the line and they're good at creating boundaries and I think there's a lot to be learnt.	Emotional Support Boundaries	ME12 (F)
	So the networks are so important. For me to take on mentees yes, and why its been important to me that my mentees are women is because I believe there's such a dearth of mentors for women, that if I'm mentoring a man well that's me gone out of the equation. So it has all that, that has been important.	Social Networks	ME/MR1 (F)
	I do see that this idea of women	Support	ME/MR1

Theme	Evidence – Verbatim responses from research participants	Sub-theme	ID
Mentoring and Gender	*needing support is really, really important. And along the way I have got support from various people and there are certain points in my career where I can say well that was because X said that to me, or reviewed something for me or whatever. And I would consider that to have been very important to me and I think that women aren't as inclined to look for that support so this mentoring scheme gave us an opportunity …the more senior ones of us who have been here a while to actually be able to pass back to the younger generation*		(F)
	And I suppose if somebody feels the need is there let them go for it but I would feel quite strongly certainly for me personally as a woman that it's important that I'm mentoring women.	Gender	ME/MR1 (F)
	And I think some of it that they have been damaged by experiences. Where they've been told they're not that good. Or the self-publicity of the men is having an impact and they're not convinced. So they kind of swallow the publicity of the.	Lack of Belief	M11 (F)
	I think the kind of traditional gender way of displaying. Culturally appropriate way of displaying ability for women is to not over state it. So when they see it over stated, they think that oh that person must be brilliant. And they're damaged easily. They're sensitive to other people's comments. And that kind of erodes as well.	Lack of Belief	MR 11 (F)
	I mean my first one was, I remember thinking, how on earth can I help this person. You know who is not my, not my gender, not my department, not my area, not anything. It was like, okay let's go, sit and have a chat and see. And then you sit down and as he started to talk. It was a case of okay, you know what, issues are issues wherever you are. Its fine, it makes no difference. But I think the idea of being randomly matched is better for everyone.	Gender Blind Matching	M9 (F)
	I've been told that I need to take off my	Gender	M11 (F)

Theme	Evidence – Verbatim responses from research participants	Sub-theme	ID
	gender tinted glasses. Again, by senior people like I'm talking about you know vice president to president, Dean level".		
	It didn't matter to me at all. I have two females, now that I've mentored during this process. No, it certainly is, it didn't make any difference to me as a mentor you know, I would have mentored in the same way as if it was two males. And for them as mentees I think it helps them more to have a male as a mentor and maybe that's because I had quite a bit of knowledge of how the university works and how systems work and how processes work here in the university. But no I think it took a few sessions, it took about three or four meetings to build up trust and just build up a relationship. But I think after I had worked, the male/female relationship worked very, very well.	Men as mentors/ building rapport/ trust	M12 (M)
	"I don't think I can't remember if I specified whether I wanted a women it wouldn't be like me now I have to say because I try not to so I can't actually remember whether that was something. Although I am very interested in women in leadership roles and the path that a woman has to take now"	Women as role models.	ME1
Mentoring and Gender	*"I wanted a kind of female mentor but I do think if we can get more men involved that would be very good to kind of support staff"*	Men as Mentors	ME10
	"And I don't see an issue whatsoever, male or female. But I do know that in the school of education that there's a lot of females who've done very well for themselves"	Gender neutral	ME11
	Not too bad yea, but like when you see females doing very well and getting professorships. And getting the positions, like do you know it's like, well go on I want to know	Ambition	ME11
	Yeah, that was just kind of what thought that went through my head there, like I would feel maybe less confident in kind of like having a	Men as mentors	ME12

Theme	Evidence – Verbatim responses from research participants	Sub-theme	ID
	shared experience like kind of with a male but I would feel, which is not a good thing to say, that like a male would have more knowledge, necessarily more seniority, and so I could gain more.		
	But I suppose if you look at the context of what was happening with the universities and within third level education generally for woman and is still reflected. Where perhaps you know women female researchers, female educationist might not climb the greasy pole as quickly as their male colleagues. They might often and maybe and this I know that this can sound a bit biased but you know there may be more issues in relation to work life balance; child care needs all of those kinds of things that impact on women more than men. I personally believe that that is the case for a lot of women so in that sense I suppose it was important to establish it for women first	Support	ME2

Appendix 5: Mentoring attributes

Theme	Evidence – Verbatim responses from research participants	Sub-theme	ID
Mentoring Attributes	*You know, the reading around of your job, the, again all that side of things, making yourself kind of an expert, you know, that kind of, and again as I said the ability to be reflective, those kind of, and then as well her interaction with other people, her interpersonal skill I suppose as well"*	Reflective	ME1
	But after a time like kind of the reflection is well maybe I need to kind of do more for that change to kind of happen"	Reflective	ME12
	One obviously is professionalism, I think that's key. Again her dynamism, integrity would be hugely valuable and her, again I haven't maybe mentioned it but I suppose her academic approach to her role.	Professionalism	ME10
	And I think that she had, she had managed to progress through the institution with a great sense of integrity and I really admired that in her and that's, you know, she was able to bring people with her, she got on with people, she understood how the place worked and she worked with it.	Integrity	ME10
	And the other thing is he's very open, you know, so he would share what advice and experience he had to offer readily, every bit as much advice on things that didn't work, things I wouldn't do again, things I seen others do that I wouldn't' suggest a third person do – as against being concerned with putting a brave face on things or, you know, putting the best foot forward or that sort of thing.	Openness	ME10
	I would be looking for somebody …. who has successfully navigated their way through the promotion process.	Promotions Experience	ME11
	So there wasn't kind of a clear process of how you would do it and then I kind of realised I needed to be looking more solidly at the career in terms of where I wanted to go and	Career Advice	ME7

Theme	Evidence – Verbatim responses from research participants	Sub-theme	ID
	what I wanted to do. So I thought why not get advice or ask, have a mentor focus on it to look at those elements with me.		
	But because they were new to the process it was probably good because they gave me the kick to keep going regardless of what the politics are you need the experience.	Experience	ME/MR 2
	So listening, I guess you do need a kind of a collegiality and with that I would put a kind of a credible collegiality.	Listening	MR11
Mentoring Attributes	*I think the main thing is listening, to be a good listener. I think that's the main thing. Like even if you were asking me these questions here I have to listen very carefully that I don't have to say can you repeat the question you know. So I think being a very good listener, and also trying to listen you know between the sentences and listen to see what's going on you know is there something happening in the background I'm trying to tease it out like you know. I did a counselling course with the counsellor here in …*	Active Listening	M12
	Letting them draw their own conclusions rather than me trying to kind of force feed.	Coaching	MR5
	And helping them to, just very often it's a matter of acting as a sounding board and letting the mentee say well you know this is what I think or where I would like to be in 5 years' time or this is how I would see my career or how I would like it to develop.	Sounding Board	MR5
	And yes it grew in ways that could operate in parallel with my job as part of my job but certainly gave me a level of satisfaction that I wasn't getting in my current job. So that really was excellent advice that she gave and that is and it is my whenever I do have one of you know one of those days where you are feeling a bit demoralised or whatever. If I go back	Guidance	ME1

Theme	Evidence – Verbatim responses from research participants	Sub-theme	ID
	into that and I do a lot of research now in that area I go back in to the research and get into a frame of mind that keeps me engaged…		
	One obviously is professionalism, I think that's key. Again her dynamism, integrity would be hugely valuable and her, again I haven't maybe mentioned it but I suppose her academic approach to her role.	Professionalism	ME10
	Now he would've always have been able to give very good, impartial advice on things like that. So I found that very beneficial. In terms of my teaching, I would always have looked on him as a very good role model.	Advice	ME11
Mentoring Attributes	*Yeah, I mean definitely in terms of I suppose like for me it was like kind of, at the time it was like a practical microcosm of the skills that I would have learned in the guidance counselling so like kind of the active listening skills, the paraphrasing because like when I meet students I get the opportunity to kind of do some of that like kind of counselling but it's very short and sharp and it's often like kind of a once off meeting. Whereas the mentoring like kind of allowed me the opportunity to develop like kind of that relationship with someone and do it like kind of over a more prolonged period*	Guidance	ME12
	I would say definitely the openness and very honest approach with him, you know, you never felt, I never particularly felt I was being managed or, or not being open to, so that, that honesty and open approach was very, very good, very refreshing, very, very good for building the relationship. His exploration kind of mode where he would, you know, very keen to, you know, look at something, look around it, ask the questions in different ways, I definitely liked that approach. Huge amount of enthusiasm	Openness Honesty	ME8
	You know, he was someone who came with a view of well look, this is	Advice	ME9

Theme	Evidence – Verbatim responses from research participants	Sub-theme	ID
	kind of advice and suggestions and things that have worked for me, but he wasn't at all worried about or precious about whether I adopted them or not.	Openness	
	So I think they have to be basically an optimist, or a pragmatist. And that they can sympathise and empathise. But okay that's fine, okay now what do we do that's probably important as well you know.	Optimism	ME/MR 1
	He wasn't someone who became a mentor as, you know, I am the expert, I'm going to tell you how to be a mini …….	Professionalism	ME9

Appendix 6: Mentoring matching process

Theme	Evidence – Verbatim responses from research participants	Sub-theme	ID
The Matching Process	*For mentoring it was important to me that I kind of had a say so in relation to not that it wasn't any it wasn't a personal relationship but you know what I mean it was I felt it was knowing her also helped me to embrace it very positively so no I don't think it would matter to me*	Choice	ME11
	I think I should have the ability to say I know that won't work because there might be something there that we know you know you know nothing about.	Choice	ME11
	I think its important because of the political angle and you can get very siloed in your own school and in your own department. So you need to see the bigger picture. So therefore you need somebody outside your own small organisation, like your own part of the organisation so that you can see the bigger picture.	Cross Faculty/Department matching	ME3
	If you are matched outside it can be easier to actually describe your situation or what you're trying to do with, with it being very anonymous, whereas if it's in your own area there's, there's always, you know, a certain, a certain awareness of everybody, of everybody else's activities, so I think there can be more freedom in almost being pared outside. But that being said there's pro's and con's to it, you know.	Cross Faculty/Department Matching	ME7
	So I didn't, again I didn't have any preconceptions over, beyond that over what kind of person I wanted. It was the fact that it was discreet; it was somebody from another department. And they were at a higher level, so I could hopefully gain some knowledge from it, I was happy enough.	Formal Matching	ME6
	I could have a mentor who would be familiar at least, at the very minimum with my discipline area. I think that would be helpful.	Discipline Knowledge	
	No it didn't but what probably did matter	Formal	ME2

Theme	Evidence – Verbatim responses from research participants	Sub-theme	ID
	was knowing something of the person you know probably helped. I was really pleased about the matching. Because she would have been the person I would have chosen now not necessarily because she was female	matching	
The Matching Process	*I wouldn't feel confident about mentoring someone about their research, who was in science and engineering or something. But I think if like, one person I worked with in particular. He hadn't got progression. And he was really angry, really cross. And that was why we wanted mentoring and he sort of felt very turned off. And so we worked through that. And I helped him with that. And I was, I felt I was able to help him with that. And also, I was removed enough from his own situation that he could be very honest with me. So I think it depends on the purposes of the mentoring really, you know.*	Discipline Understanding	ME/MR 1
	I can see my scientific background could help somebody you know, conversely. But like engineering and science can help each other.	Discipline Understanding	MR2
	It does need to be somebody senior to you and it doesn't necessarily mean someone senior in years I mean senior to whatever your needs are. There is no point in you know two of you going down together	Experience	ME2
	It was her expertise both as a researcher and as an educationist but particularly as a researcher for me that was very valuable so it didn't make any difference if she belonged to AHS or whether she belonged to EHS do you know what I mean.	Mentor Experience	ME2
	Well we were asked questions around what type of a mentor would we like, so we were asked to fill out a form and as part of that you were asked to indicate whether you'd like a male or a female mentor. And so the matching process was done by the people running the scheme, it wasn't something that we were part of.	Formal Matching	ME3

Theme	Evidence – Verbatim responses from research participants	Sub-theme	ID
	I think its much better to have a formal matching process. And one where you gather information on what each side wants so that then you can actually engage in an actual matching process. So I thought it was, I mean I thought it worked quite well the matching process for me anyway from my perspective	Formal Matching	ME3
The Matching Process	*I think it's important that the mentoring process is continually rolled out so when one twelve month period is finished that then it immediately starts again for the next twelve month period. so that then people across the organisation know that there's a mentoring scheme available because lots of people wouldn't know that there was a mentoring scheme available currently because its been quite some time since there was communication around the mentoring, formal communication around the mentoring process*	Mentoring Duration	ME3
	But the mentee that you matched me with was ideal because we were both support services and we are both dealing with academics and administrative staff. So we are dealing with both aspects of the whole community and you are both core to the whole operation of the university as well. In the sense that we are both support services but we are both supporting students and staff.	Cross Department	ME4
	My guess is that those on the career side will definitely be going for the more senior person most relevant to them that could, could help, and then if it's more on the personal development side then it's, it's better to push out further afield. But the kind of thought would be that in its current shape you can kind of cater for both of those and tease them out as they come in rather than if names, I think, yeah, I think if names go up then definitely, if you have a professor, senior, a very senior person I think there'd be a tendency for everyone to lean towards, towards that person.	Mentoring goals	ME7

Theme	Evidence – Verbatim responses from research participants	Sub-theme	ID
	Because it puts you in touch with people, outside of your own disciplines, outside of your own faculty. And that can be very refreshing. So for instance, I worked with someone in a different faculty altogether. Who I would never have come in touch with. And I think he was able to talk to me in a way that he wouldn't have, if we were in the same department, or in the same faculty.	Cross Faculty	ME1
	I'd be leaning more towards, that somebody outside of your own area can actually, well one, have a less skewed overview because they're not influenced by whatever is going on in the particular area, they can have that more step back and, view, and talk to you again with less, I suppose less angles really. So I would be a fan, yeah, I'd definitely be a fan of having a mentoring process where you can go outside your own department.	The Matching Process	ME7

Appendix 7: The mentoring relationship

Theme	Evidence – Verbatim responses from research participants	Sub-theme	ID
The Mentoring Relationship	*What life coaching may be missing in that sense is that when you go to somebody you're having to explain all about the institution, the dynamics, all that kind of stuff, whereas somebody who is in the institution knows that automatically and they can, as I said, they can help you navigate it and I think that's something that people need, that would be very helpful.*	Form Institutional mentoring	ME10
	We are all a little bit like kind of silos of excellence or, you know, and in that silo it can be very easy to kind of lose sight of what's happening elsewhere.	Cross Faculty Access	ME12
	I think the formal process is much more valuable because I think, like well I'd be for a structured approach anyway, would be like kind of part and parcel of the way I would prefer kind of to operate but I think you could lose people who wouldn't themselves have the initiative or like kind of feel comfortable of approaching someone. So I think when you've got the structure in place that people can apply and a match is suggested for someone.	Formal Mentoring/ Formal matching process	ME12
	I thought there was huge benefit to the academic mentoring process, particularly around career progression and I saw that the day that I attended the information session And that that crosses the boundaries of faculty and if anything it is more useful to meet someone from a different faculty.	Formal Mentoring	ME12
	I applied formally and I was assigned a mentor then.	Formal Mentoring	ME5
	I think it's much better to have a formal matching process. And one where you gather information on what each side wants so that then you can actually engage in an actual matching process. So often the matching process can allow you to be matched with somebody that you might never have ever thought of being matched with and yet it could work out to be a very	Formal Mentoring	ME3

Theme	Evidence – Verbatim responses from research participants	Sub-theme	ID
The Mentoring Relationship	*positive relationship. So you can't over analyse the matching process sometimes.*		
	Yes that was extremely beneficial. Because it gives the mentees and the mentors a sense of kind of, a framework from which to work from. So you know you are not just going out I suppose really that you know that there's a support network behind you. So you are not just saying we are going to embark on a mentoring scheme but what do we do? So it explains the whole process and the benefit of the scheme. And at least we know this is the structure we should work towards and modify it for your own purposes.	Formal Agreement/ Framework	ME4
	The training did help because it gave scope for what the actual mentoring relationship should be like and I suppose a start and an end to it as well	A structured approach	ME7
	Well I suppose I was at the point where I had just finished my PhD and I needed some direction. You know, suddenly and this is a really interesting piece actually. You know when you're doing your PhD, you have your supervisors. And they're there all the time, you know, to get support.	Direction	ME5
	I suppose my primary reason I think was I had built up quite a lot of knowledge and information about how the university works and I'd sat on numerous committees and I'd been on a promotions committee, student status for our Department. So quite a bit of knowledge and quite a bit of networking done right across the different faculties of the university.	Motivation to Mentor	M12
The	*And I do recall quite a big deal being made of the distinction between – coaching is where the senior person tells the junior person what to do and mentoring is more where the senior person guides the junior person, this is what has worked for me and you might want to have a look at it too – which both of us took on board immediately*	Mentoring and Coaching A structured approach	

Theme	Evidence – Verbatim responses from research participants	Sub-theme	ID
Mentoring Relationship	*we heard it, you know, it was one of those things, when it's said to you by someone else you go yeah, that makes sense, you know, it was kind of – and there was a lot of that during the year, kind of both of us were kind of looking at it and going yeah, yeah, I'd have done that too, yeah, that makes sense – but it kind of did make sense.*		
	I suppose right at very start doing the training made, I suppose you know I would tend to be what I would consider to be a good listener. To be able to evaluate and to walk away but I think one of the things that I learnt very specifically in the training is that you actually have to let the mentee do that. They are the ones that have to figure it out. So you can prompt and you can give your little bits of advice but it has to come from them. ….So that would have been a big learning for me, is how to just make sure that that's what was happening. So it was a very supportive discussion rather than a go do this type discussion. So that would be one thing that was very important.	Mentee led	ME/MR 2
	The fear would be it gets right back to the original point where we talked about should people choose their own mentor. I mean how do you know who to go to, how do you, and there could be a very big fear that that could become gendered very quickly. So that a young man will walk in and say I'm going to the vice president to ask for mentorship but a woman would never do that. So that would be, to me that would be the big fear on that, so I think the mentoring certainly within our structures would have to be there.	Formal Mentoring Relationship Formal Matching	ME/MR 2

Appendix 8: Mentoring and knowledge

Theme	Evidence – Verbatim responses from research participants	Sub-theme	ID
Explicit Knowledge	*Like kind of practical even in terms of say like HR policies and looking at like kind of ……know, work outside of, outside of your own role and like kind of what the requirements are so it was just, it was a good guidance as well like kind of from a practical*	Explicit HR Policy Knowledge	ME12
	I suppose two tiered and like kind of different levels but say in our division now a lot of new people have come in and so there's a lot of institutional knowledge that I'd have that I could share.	Explicit & Tacit – Institutional Knowledge	ME12
	Well you put a chemist and a microbiologist in the same room and you're going to end up with something reasonably analytical, you know, it's not, it's not surprising that it's covered in diagrams and doodles and tables and the rest of it.	Explicit Knowledge	
	I suppose as a mentor like kind of that practical information would as I said be very much around, you know, I like say with one of the mentees would have said look, you know, if you want to bring along your CV	Explicit Knowledge	MR2
	I still do certain things that she suggested in relation to time management and time management tools	Explicit Knowledge	ME2
	Well the learning centred all around career progression. And that was really the only thing that we really got involved in discussing as part of the mentoring process. It was really all about career progression and how to overcome obstacles to career progression. But that worked for me. So that's not to say that she couldn't have offered other insights but that was really what I was looking for a mentor for. So I suppose in some ways I directed the…	Explicit & Tacit Knowledge sharing	ME3
	We co-wrote the next article which was another performance assessment article. So I kind of tried to bring her in that so that she could share the	Explicit Knowledge	ME1

Theme	Evidence – Verbatim responses from research participants	Sub-theme	ID
	experience and now myself and herself and another head are working on another article. So it just took me down a path that has led to publications and research and all of that sort of thing yes.		
	"It ended up being a lot more kind of immediate.....what do you call it....technical advice rather than strategic	Technical Advice	ME8
Tacit Knowledge	*She had the knowledge to do that as well so she wasn't as I say sending me off in the wrong track she wasn't saying oh maybe look at this. When she gave advice it was meaningful advice it was broad it was like that won't work don't do that and why it won't work and that helped you know now that wouldn't suit everybody. But it suited me you know*	Meaningful advice	ME2
	I had a tendency to kind of organically approach things whereas, you know, let's say we were, we had a meeting and, you know, I was kind of worried about the meeting and she would ask, she really got me to sit down and think about the outcomes and look at the objectives that I wanted to achieve at the end of it and then how was I going to work to those goals, so how was I going to ensure for example that the consultant was going to deliver on specific targets. Then she would say, well identify those targets, contact the consultant, you know, be more proactive actually, be more, rather than being reactive and I think that difference between pro-activity and reactivity has a lot to do with maturity in terms of where you're at in your own role.	Practical Advice	ME10
	I suppose what I liked about her was she had a solid understanding of the institution and how to navigate it and I think that's probably the biggest thing I have learned from her was an acceptance and an understanding of this is the institution you work in and this is how it operates.	Institutional Knowledge	ME10
	In our division now a lot of new people have come in and so there's a lot of institutional knowledge that I'd have, just from being here for so long, and like	Intrinsic Knowledge	ME12

Theme	Evidence – Verbatim responses from research participants	Sub-theme	ID
	while there is an element of an induction programme for new people it is that intrinsic knowledge that kind of people have.		
	So I thought it was a good opportunity to learn, I suppose to learn or obtain skills, or to obtain knowledge that would not be written down. *You know, so there's nothing like talking to someone to gain life experience, you know, sharing their knowledge can be very beneficial to apply it in your own context.*	Shared Experience – Tacit knowledge	ME4
Tacit Knowledge	*That was the key learning, the tacit knowledge that you won't find anywhere else. You can talk about examples or you can discuss problems you know objectively and they can, by looking at, they can impart their knowledge as to the best solution to resolving these problems. That's probably the best way to put it you know, so the people are very focused on a particular issue but when you are talking to someone from a separate department they have a different perspective on the topic. And its very important and you learn the importance of looking at a problem holistically you know from all perspectives.*	Practical Tacit Knowledge	ME4
	It was more tacit information, it was nothing kind of specific.....either specifically helpful or kind of actionable in that sense, you know, so it was a lot of tacit information in terms of understanding background rather than advice on, you know, actual advice on how to, how to go about doing, doing certain things. That was probably kind of due to the nature of our mentoring relationship and due to the, kind of due to my personality and my manager's personality, probably wished it would have been different but that's, that was fine so that's, that's what we, what I knew I could, could get out of that.	Tacit advice	ME8
	That kind of Institutional knowledge and guidance. Being strategic, in terms of what you take on and what you don't	Relationship Building/networking	ME/MR1

Theme	Evidence – Verbatim responses from research participants	Sub-theme	ID
	take on. She'd say that's invisible, don't do that do this, this is more visible, this is more valuable.	Visibility	
	Lots of different types of information that's been shared and some of it is like how things work. *It's the inside track isn't it.*	Tacit Knowledge the inside track.	M1
	But when it comes to the mentor/mentee relationship to me there should be a purpose to it. And that purpose should be take the EU grant or the research, so in that case it was a case of I need to learn how to get involved in EU grants. And so what did I do in my career to get involved in EU grants. How did you build your networks, how did you pull people together. That kind of thing.	Practical Knowledge	ME/MR 2

Appendix 9: Mentoring and learning

Theme	Evidence – Verbatim responses from research participants	Sub-theme	ID
Mentoring and Learning	*I've seen a lot of issues arise within departments because of emotions or, you know, people taking things personally and I think a lot of men are much better equipped to kind of draw the line and they're good at creating boundaries and I think there's a lot to be learnt. I know at this stage of my career that's something that I've kind of learned the hard way and I think that it would just be, I would like to get the perspective of a man I think in that area.*	Insight	ME10
	I would have learned from her, the idea of being prepared in terms of your interactions with people, you know, rather than just going in, you know, but that you'd actually have your questions prepared	Learning from others	ME10
	Well the learning centred all around career progression. And that was really the only thing that we really got involved in discussing as part of the mentoring process. It was really all about career progression and how to overcome obstacles to career progression. But that worked for me. So that's not to say that she couldn't have offered other insights but that was really what I was looking for a mentor for. So I suppose in some ways I directed the…	Career Progression	ME3
	How to play the game in terms of research and in terms of career progression	How to play the game	ME3
	I suppose when I looked at my reflections on the scheme I was really learning I suppose to learn about developing and maintaining professional networks across campus that was what I was thinking and how to think rationally under pressure, they were the two kind of objectives	The importance of Networks	ME4
	The feedback is important because it gives you a sense of what you need to do.	The valued of constructive Feedback	ME4

Theme	Evidence – Verbatim responses from research participants	Sub-theme	ID
	It's the spotlight that you're putting on your career and what you need to develop and you're having somebody engage you on that and then the second one is just awareness and learning and hearing what's going on around.	Value of support	ME7
	She was quite explicit about the rules of the game. And I can remember feeling quite naive and she sort of unfurled the rules of the game.	Insight	M11
Mentoring and Learning	*I went in to it really hoping to learn more what you might call the tricks of the trade, the kind of things that you don't get in a training manual, you look at a peer group and you go how is someone……– and I was delighted to get … as a mentor – how is he getting published in Nature, which is the journal everyone wants to get in to, and of forty-seven academics active in….. at the time he was the one regularly published in Nature, how is he doing it and the other forty-six weren't, how was he getting text books out and teaching and progressing as far as professor.* *And, you know, it was the kind of thing – no one is ever going to even tell you how to do that because often times the people who cracked it may not necessarily want their closest competitors or those coming along behind them to know how to do it, so when the opportunity came out to, to kind of even get a few hints like that I was very keen to take it,*	Insight	ME9
	So yeah, I kind of went in to it hoping to, to learn a few tricks and skills of the trade and I suppose along the way I actually ended up learning a lot more than I'd expected.	Learning the tricks of the trade	ME9
	It wasn't what I'd come in to the, the process expecting to find but as I worked through the kind of the, the more formal reflections and planning in, you know, strengths and opportunities and challenges and all that kind of thing and also the kind of,	The need to reflect	

Theme	Evidence – Verbatim responses from research participants	Sub-theme	ID
	the informal discussion around it, I think what I realised very quickly was that the plan I had come in with or the kind of the, the picture of the future I'd come in with was one of plainly vanishingly small odds.		
	For my own learning I think it was not so much the idea of going for things because of my own qualification or confidence level it was more you know just break through this politics. Stop worrying about the politics, get on and do it. And I think that was very important for me.	Insight	ME/MR 2
Mentoring and Learning	*The learning that, I suppose my own experience has been very gendered. So to me a learning that takes place is that there is support out there. That it can be very difficult, that it can be very difficult to be a woman and a senior woman. Or viewed as an ambitious woman, in universities. But you will find fellow travellers, who will be very supportive. So I mean a woman that I would have used, now retired. I would've used a lot for bouncing things off. Always her line was, look to your supporters, stop looking at the detractors. There'll always be detractors, you'll always be tortured with the people you know, throwing mud and snowballs and all the rest of it.* *Just listen, you know look for the supporters move with. And perhaps men know how to do that intuitively and women have to learn it.*	Support - Learning from others	M11
	Yeah I think it was a two-way learning process, certainly it was. Okay there is the transfer of information from me to the mentee. But I also learnt. It certainly was a learning experience for me in that it helped my communication skills. It probably helped me in terms of getting more prepared for meetings because I knew when I was meeting this person you know next Tuesday morning or next Wednesday morning that I had to be prepared. I had to	Mutual learning	M12

Theme	Evidence – Verbatim responses from research participants	Sub-theme	ID
	have you know whatever information they required or whatever help they needed I'd have that prepared. So it definitely helped me from a professional perspective, it helped me be prepared for meetings. And helped me communicate with people and also gave me confidence as well in ensuring the information I had and the facts I had and the learning, my prior learning you know was correct and it was good and it was sound.		
	You need to do X, Y Z. If I look at this and I need to do X, Y, Z and I'm not doing any of that. And they are you also start to question well actually what am I doing. And then what are my priorities. They're not necessarily about promotion, they maybe about the job, the work. The development that I'm doing as a person. And then you start to look at where you're going, what you're doing. Because it's very hard to say to somebody, you need to do this. When in actual fact, you're not doing any of it yourself.	Self-reflection	M9

Appendix 10: Mentoring outcomes

Theme	Evidence – Verbatim responses from research participants	Sub-theme	ID
Mentoring Outcomes	*There were two participants, one mentor and one mentee who iterated that the mentoring process had most definitely played a crucial role in at least one promotion and in securing one competitive funding bid.*	Extrinsic outcomes – Promotion	FG
	Both my mentees were promoted to senior posts and on both occasions they had not received encouragement and support within their own Schools. The scheme opened doors that would otherwise have been closed to them and I am delighted to have been able to contribute to that.	Promotions	M1
	But I think it's important at an organisational level to demonstrate that mentoring is valued as an activity within the organisation in order to help people in their career. Particularly at a time like this when there are so few promotions available, people need to have, they need to have the ability and the confidence to continue to work towards promotion even when the promotion process is stalled. So they need to have faith that the process will revive can that they can achieve their goals. So I would think that it would be important that the mentoring process would be communicated and that people would know that it was there to assist them.	Value to the Institution	
	Because I just I have made it more my own and things have arose so I spoke at a conference after a journal article I was part of was published and my research developed and grew in ways. And it continues to grow. I became a speaker in Ireland for a particular tools and measures in academic libraries…	Extrinsic Outcomes – Research Outputs	ME1
	It shifted where I was and brought me to a more positive place. That with other things I would say so it did I mean it's hard to point to benefits but as I said now when I talk there about	Confidence – Positive Attitude	

Theme	Evidence – Verbatim responses from research participants	Sub-theme	ID
	library performance assessment and measurement and that whole area that I have now developed a real interest in. and that has been a great experience for me		
Mentoring Outcomes	*If I were to think in terms of intrinsic value of it, it would be the confidence to go and explore that because for me the opportunity, like I might be thinking in writing and planning, you know, of all of these things, when you brainstorm it with someone else and when someone like kind of gives you positive feedback that that's like kind of a good idea or there's value to that, then that like kind of, you know, gives confidence in me to be able to kind of go and explore it*.	Confidence	ME12
	I kind of went in to it hoping to learn a few tricks and skills of the trade and I suppose along the way I actually ended up learning a lot more than I expected.	Learning	ME9
	The surprising outcome for me certainly was one I wouldn't have expected at the outset was I realised quite, quite early in the process that there wasn't much realistic prospect of an academic career in …	Career Change	ME9
	Going for Governing Authority. It wasn't really about being on governing authority …….it was more about the challenge and the opening up. It was a way of dealing with the contact issues and the networks issue and a way it gave me an opportunity to knock on doors. To meet people who I knew that didn't really know me.	Expanded Networks Assertiveness Confidence	ME1
	One thing I actually did say that I myself have found that as a result of being involved in mentoring I now reflect more on my own work and I am more self-aware.	Reflection	ME10
	I suppose it's the thinking time, you know, actually thinking and again maybe being strategic in terms of how you approach things, those key things were big learnings for me and I think	Being Strategic	ME10

Theme	Evidence – Verbatim responses from research participants	Sub-theme	ID
	out of that group, you know, how I approached this, she was very good at kind of, and questioning as well		
	The opportunity to take time out it allows you to figure out what it is you want to do or where you want to go and I think like kind of that mentor/mentee, that relationship, to me that's what that characterizes, the chance to take time out to explore, you know, to explore what you want to do or where you want to go like kind of in the context of life and work.	Time to reflect	ME11
Mentoring Outcomes	*She challenged but I mean I found the whole experience so positive. I would attribute her with you know giving me the push with regards to PhD and down to real practicalities*	Being Challenged	ME2
	Well no, but the reason for that is because of the timing. So because I started the mentoring process at the time when the university basically went into lock down so the austerity measures etc., etc., so there were no promotions at all possible. So it just wasn't possible to get promoted. So there were no actual tangible outcomes as a direct result of the mentoring process. But there were lots of intangible outcomes. So I understood a lot more about the importance of specific criteria for promotion. So I actively worked on those so that when the time would come that I would have the opportunity to be promoted, that I would have all of the things on my C V that were needed in order to get promoted.	Tacit/explicit Knowledge on Promotion	ME3
	That type of tacit knowledge is really what you are hoping for when you get involved in a mentoring scheme. Because everybody will tell you you know what the specifics are in terms of the criteria for promotion or career progression. But it's not until you actually speak to somebody who's involved in playing the game that you get to know the specifics of how the	Tacit Knowledge	

Theme	Evidence – Verbatim responses from research participants	Sub-theme	ID
	game is actually played.		
	I kind of went in to it hoping to, to learn a few tricks and skills of the trade and I suppose along the way I actually ended up learning a lot more than I'd expected.	Politics	ME9
	There was no change in my career but I found it extremely beneficial, I became more focused in what I was doing and even became more I suppose ambitious in that sense as well. And I've applied for senior posts as well, you know.	Ambition	ME4
	To play the game in terms of research and in terms of career progression.	Politics	ME3
	I'm sitting back and judging situations better than I would have ten years ago	Self-reflection Identify strengths & challenges	ME6

Appendix 11: Sample transcript – ME9

Duration: 43.49 Minutes.

Q **Thank you? for agreeing to be interviewed on mentoring. Some background on why I am undertaking a review of mentoring. There has been quite a lot of research done on mentoring but more so between academics and their students as opposed to formal staff mentoring. I am particularly interested in looking at the outcomes, if any, were experienced by mentors and mentees who've engaged with our formal programme here in … In particular the knowledge exchanged between mentors and mentees and the learning experienced if any. So just before we start you might just give me a little bit of background of how long you're with the institution, how long you've been in your current role and why you engaged in the mentoring programme in the first instance.**

A Okay. Well I'm back in … as staff since February of 2006. I had previously done my degree and PhD here and I went to what was Materials Ireland In Trinity College, it's a post doc, three years, 2003 through 2005 and then I came back originally to The Stokes Institute and moved from there to MSSI in the summer of 2007. I'll actually be honest, I can't remember off the top of my head when it was, the year I did the mentoring with? It was ? Who was my mentor?

Q **Okay, yeah.**

A I very much remember doing and enjoying the year, I couldn't actually put a year on it for you.

Q **So talk to me about your mentoring experience?**

A Yeah, I'm sure we did that, it's there somewhere. And then since that I was out on secondment for two years to the Irish Centre for Composites Research when it was set up and I'm back in MSSI but in a different role since the summer of 2014. Before I went on secondment I had been looking after the ophthalmic for microscopy and raman spectroscopy labs, so kind of more of a traditional post doc type role and since I've come back my job title is Scientific Support Officer, which nobody can explain to me what that is, including myself, but in effect what it is managing the core labs that are run by MSSI looking after the equipment base that's offered as a walk up and use equipment base to the researchers and then a whole load of other stuff that comes up and then about half my time now is taken up with health and safety. There's an element of IT support in it, there's some training for particularly new arrivals, new staff, new post docs involved. I've gotten somewhat involved in transferring how we do an MSSI to the Bernal Project next door to us, and that's, that's pretty much a mix of, of what takes my time.

Q **Why did you get involved in the mentoring programme?**

A Well at the time, well I suppose I'll be honest, at the time I was still interested in an academic type of career and pursuing that and I'd say my thinking in that probably goes back to sometime, it would have been around 2009 when I got my CID, I started thinking in terms of how to plan ahead my career and, you know, put a plan in place for it to evolve, so I was kind of looking to do something like the coaching, I would have thought of it more as coaching than mentoring, to be honest, but I would have been looking to do something around that sort of peer to peer training when the mentoring programme was launched. And I suppose I went in to it really hoping to learn more what you might call the tricks of the trade, the kind of things that you don't get in a training manual, you look at a peer group and you co how is someone like ? – and I was delighted to get ? as a mentor – how is he getting published in Nature, which is the journal everyone wants to get in to, and of forty-seven academics active in MSSI at the time he was the one regularly published in Nature, how is he doing it and the other forty-six weren't, how was he getting text books out and teaching and progressing as far as associate professor, as he was at the time, he's full professor now, when others weren't. And, you know, it was the kind of thing – no one is ever going to even tell you how to do that because often times the people who cracked it may not necessarily want their closest competitors or those coming along behind them to know how to do it, so when the opportunity came out to, to kind of even get a few hints like that I was very keen to take it, and as I say, I was extraordinarily lucky to be matched with ? as a mentor because he was very, very open and very, very helpful and I think personally we struck, we kind of struck it off very well together too, you know, we got on with each other in a friendly manner as well, and we still would even to this day.

Q So would you say your mentoring relationship lasted after the mentoring programme?

A You know, like for, we haven't been in contact as regularly of late, just because now that he's gotten involved in the, the quality support side of things, and my work as well, we've both been very busy the past while to catch up, but we would still regularly catch up for coffee and a chat and see how things are going and that sort of thing.

Q What learning did you experience from being involved in the mentoring partnership?

A So yeah, I kind of went in to it hoping to, to learn a few tricks and skills of the trade and I suppose along the way I actually ended up learning a lot more than I'd expected.

Q Did you? What kinds of things did you learn?

A What I ended up doing in the course of the year, and this kind of evolved naturally out of the, the conversations we had around the process, you know, there was a, a reasonably structured formal process for the year set out in terms of initial meetings – you know this as well as I do – but do you remember

the way those initial plan, that people would kind of meet originally, they would agree objectives for the year and then the mentee would go off and work on these and at intervals would check in with the mentor –

Q How did the plan work?

A We would review the plan like – well we worked that but there was a lot of more informal chat and conversation and regular catch ups and the like around it and it was actually, that was the most useful part of it because what that really got me thinking around as we talked over coffee was not so much the mechanics of what I was doing as part of the formal mentoring programme for the year so much as informally where was the through process actually taking me afterwards. And I suppose the, the surprising outcome for me certainly was one I wouldn't have expected at the outset was I realised quite, quite early in the process that there wasn't much realistic prospect of an academic career in …

Q Okay.

A And it didn't take a whole lot longer afterwards before I realised there was little enough prospect of a sustainable research career in … either.

Q How did you deal with this realisation?

A So there was a bit of thinking needed around this.

Q Okay, yeah.

A It wasn't what I'd come in to the, the process expecting to find but as I worked through the kind of the, the more formal reflections and planning in, you know, strengths and opportunities and challenges and all that kind of thing and also the kind of, the informal discussion around it, I think what I realised very quickly was that the plan I had come in with or the kind of the, the picture of the future I'd come in with was one of playing vanishingly small odds.

Q Was planning a key aspect of your relationship then?

A Yes and having a plan led me towards a thought process of developing what I would have originally seen as plans B and C, do you know, the kind of, the what else can I do with this and how would I prepare myself for it sort of an approach.

Q Okay. And was it through the information shared with your mentor that this kind of crystallised?

A Yes it dawned on me, quite quickly actually when it came to it, as a consequence of the informal discussions I'd had with ?, you know, not in so much of anything he would have said directly like, but in terms of just looking at the numbers, looking at the, the turnover in students versus staff going through institutions, the universities policies for recruitment and retention at the time, comparing the policies on the one hand versus the training and development that was being offered on the other and noticing quite quickly that they didn't match.

Q Okay

A And then, you know, my own thought processes, okay, well there is a policy that says effectively we're going to hire researchers for a single contract and turn

them over, that's not conducive to a research career, there's a policy for teaching of hiring people below the bar, where at the time the progression rate to people clearing the bar and getting multi annual contracts was below one in three -

Q These policies are openly available so how come it was through the mentoring programme that you came to this realisation?

A It was because of the discussion and the sharing of information with ? that in a funding environment at the time where the amount of funding coming out every year was decreasing rapidly, none of these were conducive to a build of a kind of three to five year plan where anybody who puts the work in and does there thing can expect to come out with an academic position at the end of it.

Q This sounds like very valuable information?

A It was and so that then prompts the question, or prompted the question in my mind, well that being so are there ways around this and even if there are what are the alternatives to it – and that' s actually what I spent a lot of my time for the year working on, was not so much the traditional career path, which as I say at the time, and particularly with the combination of circumstances, it very quickly became apparent to me that it was not, not one that had good odds attached to it – to more working around what are the alternatives and kind of more informally bouncing ideas off of ?, because ? was in the, the unusual position as well where he'd come to … from industry – so he had the knowledge and understanding of my challenges.

Q What was that knowledge?

A He'd an understanding of both sides of the coin, which I would have had some inkling of at a more junior level because I'd also come back to college to do my masters having worked in industry - yeah, there was just, it was useful to get the input of someone else who had in his own way been through a similar past to me but about ten or twelve years earlier and who'd also had a slightly irregular or kind of unusual path to his current position.

Q Okay

A You know, as opposed to somebody who had done degree, PhD, first post doc, second post doc, first academic position and never worked outside of the university –

Q Yes, yes.

A You know, who has a different view on it –

Q A different Outlook?

A - A different outlook perhaps to where I might have been coming from.

Q So what were the outcomes you experienced?

A So certainly it was a process that took me somewhere I wasn't expecting to end up but was a very, very useful process to do in terms of bringing my way of thinking around to several different perspectives on the same set of circumstances and the same point of my career that I found myself at.

Q **And with that information where did you go with it then? Did your head of department for example know you had a mentor, did you ever communicate that or was there no need to?**

A Oh he did.

Q **He did.**

A Yes.

Q **Do you think that should be the case or should there be a need for an individual's manager or head of department to be informed that somebody has a mentor outside of their department?**

A It made no difference to me because to be candid about it my line manager wasn't bothered one way or the other whether I did.

Q **Okay, okay.**

A And my line managers since have never engaged, good, bad or indifferent, with the outcomes of the mentoring process and other than it informing my own perspective on my career and where I thought I'd like it to go it never, it would never have dovetailed with the PDR system but for the fact that I used what came out of my thought processes around the mentoring to, to try and implement in the framework of PDR.

Q **So am I correct in saying that you used the knowledge you gathered in the mentoring in your PDR meeting?**

A Yes. That's kind of how I saw if this was going somewhere within …, but it was up to me to figure out what, where I needed to go next and how I was going to do that and the time and place to ask for that was in the PDR process.

Q **Okay.**

A So no, my line managers, because there would have been a change of them, knew I had had a mentor, knew I was involved in the mentoring process and it never went further than that one way or the other.

Q **Okay, okay.**

A But I suspect there would be more, other people I'd know at a similar level to me would not want their line manager to know than would.

Q **To know, okay.**

A I think for a lot of people it would be a disincentive.

Q **Okay.**

A I wasn't concerned about it because my tack on it was perhaps this is something that's offered by the university, there was no reason why I shouldn't be doing it. I, I felt going in to it it would be a good exercise, I felt coming out of it, it had been an invaluable exercise –

Q **Very good.**

A I could for the life of me see any reason why you wouldn't do it. It would be great in fact if everybody could do it, or something of the sort. I certainly felt it, the mentoring year achieved a lot more constructive outcome for me than the PDR process ever has.

Q **That is so good to hear. So why do you think more staff don't avail of the mentoring scheme?**

A I think there's a lot of people who are, especially in the research environment, you've a lot of people who are not, not Irish, not used to the Irish way of doing things, a lot of whom have an underlying concern about rocking the boat, you know, and kind of a concern that anything that's not directly tied to the project for which I'm paid, for which I'm supposed to deliver results in the next two to five years, whatever the time of it is, is going to be disapproved of.

Q **That is concerning.**

A And I suspect a fair proportion would not want to get involved if, especially if they felt that they had to ask, they had to go to a PI and ask permission for time to engage in a process that's not part of the job they see themselves hired to do.

Q **Okay – really? Okay, that's interesting that people would feel that way. So the matching process then for you, you put in your application and then what happened after that – can you recall?**

A It all happened fairly quickly. I put in my application and we were asked at the time to set out what it was we were hoping to get out of the process and if I remember correctly one of the things we were asked for was a couple of preliminary ideas on what we would like to have achieved at the end of the year to put us in a different place to where we were when we started – and when I started those would have been around bringing in research income, publication outcomes, kind of traditional academic metrics – and I was approached, I think it was by you but I couldn't be quite, very quickly once I put the form in, to say there was a possible mentor, a little bit outside of my own area and would I consider being mentored by ?.

Q **Okay.**

A And, because ?'s background is Industrial Biochemistry and mine would be Chemistry gone in to Material Science – and I immediately said yes – I knew, I knew ?.

Q **So you knew your mentor? Was that an issue?**

A I wouldn't say I knew him well, but I knew him as a colleague and I certainly knew him by reputation and I didn't have to think twice about it. So I said yes. We, I'd say within a week maybe, we met for a coffee and we had a chat about both of us, what, what we both understood this mentoring business was about and we said well look, we'd give it a go –

Q **Very good.**

A And we'd see how it went and I seem to recall we were probably one of the first pairs that were put together in that round of the mentoring programme that actually got off the ground and did our first formal –

- mentoring contract meeting quicky, as they were, where we agreed, you know, what we were about and what our objectives were for the year and that kind of thing and then yeah, that was –

Q Very good. And did you attend the training provided?

A We both of us did, both of us did together.

Q Very good – and what were your thoughts on the training – if you can recall?

A My recollection was thinking it was essential because I think ? and I probably had a fairly similar idea of what the mentoring programme was about when we went in to it and I'd say, thinking back on it, we were probably both thinking more a little in the direction of coaching than mentoring –

Q Do you see a difference between mentoring and coaching?

A And I do recall quite a big deal being made of the distinction between – coaching is where the senior person tells the junior person what to do and mentoring is more where the senior person guides the junior person, this is what has worked for me and you might want to have a look at it too – which both of us took on board immediately we heard it, you know, it was one of those things, when it's said to you by someone else you go yeah, that makes sense, you know, it was kind of – and there was a lot of that during the year, kind of both of us were kind of looking at it and going yeah, yeah, I'd have done that too, yeah, that makes sense – but it kind of did make sense. So we kind of, we went and had a second look at the provisional first stab at an agreement for what we were about for the year that we had done in the light of that, we tweaked it a bit.

Q You seem to be inferring that the formal agreement worked well. Was that the case?

A Yes, yes, because apart from anything else it put, it put a structure on what we were doing and it kind of gave us something to refer back to as time on, that we didn't let ourselves drift away too much from where we started, because it was a kind of process where it brings up so many questions and so many possibilities and kind of also brings the possibility if you go, okay, well look, I found this one thing I want to work on that you could get bogged down in to the exclusion of all else, you know, having the agreement kind of made us come back maybe every three months and have a look at it and go right, well we said we were going to work on, one thing we said we'd do for me, my preferred career progression and a plan B, like what will you do if this doesn't work out, you know, so kind of three months later it made me come back that and go right, well what have I done around this, have I actually got – the Plan A is easy but everyone wants to concentrate on where everything is going to go if it goes perfectly, the Plan B was kind of more the, the sticky one, to say right, if this doesn't come together, the hard question, right, where am I going instead, and

it kept us, it kept us on focus with that. So yeah, I think it was a useful thing to have.

Q Good.

A We had as well, we had kind of maybe the hard conversation up front, the, you know, suppose this doesn't work –

Q Yes –

A - if it's not going anywhere, we don't get on with each other, whatever, what are we going to do about it – and I think that probably made the rest of the year easier, that we had –

Q What did this process give you?

A We cleared all that to begin with. Again I suppose I was, I was very, very fortunate in having ? as a mentor, he's an easy going kind of guy.

Q What did ? particularly bring to the relationship?

A You know, he was someone who came with a view of well look, this is kind of advice and suggestions and things that have worked for me, but he wasn't at all worried about or precious about whether I adopted them or not.

Q Yes, okay.

A You know, I could certainly imagine other mentoring relationships where somebody might take the view, more of a view of, you know, I'm giving time and expertise and trade secrets and why are you not doing what I'm telling you to do.

Q Okay, so you think some mentees would feel under pressure to follow exactly what there mentor advised?

A Yeah, you know, or, or where a junior person is feeling this is giving me work to do, you know, whereas I think we, we were kind of the one mind from early on that it wasn't a job of work, it wasn't something that had to be reported on, you know, and kind of yes, it was helpful advice and suggestions but it did not have to be taken as gospel and replicated exactly either, you know, we did go back the next year actually, there was, I think there was another round, or at least there was a pause for another mentoring the year after it –

Q You did an information session?

A And we did the information session where we were joking well we didn't set out to clone a mini me and we weren't going to leave our respective wives and run off and get married afterwards either, but it had gone really well.

Q Gender – for some people the gender of the mentor is important to them, would that have had any, had you any preference for a male or a female?

A No, no, I didn't, I didn't and I wouldn't.

Q Yeah.

A No. I think the dynamic as to how people might work together might change slightly but that would change as much depending on who you got as a mentor – but no, I'd no preference at the outset one way or the other.

Q So you would say you had no real issue? Also our scheme is a mentee led scheme – so did you keep to that or how did that operate for you?

A We did, we did. Ours was fairly informal in that we, we kind of had agreed among ourselves over the twelve months where we were starting from and where, I anyway, hoped to end up and the end of it and we had agreed that approximately every three months we'd sit down in a kind of fairly formal kind of a way and look at how we were doing with it and then informally we'd kind of keep in touch with each other along the way, but the agreement at all times was that on the formal side of it, it was up to me to decide when the time had come to have the, the sit down meetings and the review and the like. Now when it came to it it was all fairly relaxed, do you know, we got on very well so it was kind of a case of going well, we're half way through, it's coming up on the end of term, right ?, when is the grading deadline – it's next Tuesday – okay, well sometime between next Tuesday and whenever the first of us is going on holidays we'll sit down and have a look at this. And it was that kind of an easy going kind of an arrangement –

Q Very good

A Which worked for us.

Q Okay, great.

A But I'd say in practice we actually ended up seeing an awful lot more of each other because –

Q How many times would he have met in the twelve months?

A I'd say we probably caught up about once a month.

Q Did ye? Very good.

A Perhaps more often, yeah, because we, we would kind of go for coffee fairly regularly anyway, we'd go off and kind of sit down for half an hour and have a chat about how it was going and the like and yeah, yeah, I would reckon about once a month during the, the scheme and probably, once a semester anyway afterwards.

Q Okay. Very good.

A And I'd say probably, probably until I, until I came back in to MSSI after my last secondment, just the last year things have been extraordinarily busy and ? has gone to, to quality a bit longer now since we've caught up, but until then yeah, we'd still catch up about once a semester.

Q Okay, that's great.

A It's actually been on, it's actually been on my list of things to do now for the last couple of weeks now term is over, to try and catch him again before people start scattering for holidays.

Q The formal mentoring relationship is twelve months, that's the way we've set it, unless there's a specific piece of work or something somebody is doing and you have a mutual agreement on extending it. What's your thoughts on the twelve month duration?

A Twelve months is probably about right. We kind of set out that what we agreed we would formally do we would have finished in the twelve months.

Q Okay.

A Because I think we were both of the mindset that if it wasn't done in twelve months it was either not doable, as in we were barking up the wrong tree, or it wasn't going to get done and we were flogging a dead horse.

Q Okay.

A So we kind of agreed that we were, that kind of I at the end of the twelve months, I wanted to have a, a career and an alternative developed and a training needs plan as to where I was going with it and o kind of have a fleshed out sense of what this meant, you know, what it was I was trying to achieve through it, you know, that what I didn't want to do was be kind of mired in the mechanics of it without any kind of a bigger picture of quite where was all this going and I think we were both agreed that by the end of the twelve months that that should be effectively complete, you know, which it was.

Q So it was very much, you kind of had a task, you focused on a particular task that you were doing. So would you say it was explicit or tacit knowledge that was exchanged between you?

A Well we kind of built it around tasks. Very specific tasks. But to me both explicit and tacit knowledge that ? had was invaluable to the experience.

Q Can you give me some examples of how you undertook the tasks?

A You know, so we kind of built it around, for the first three months, me kind of putting a description around what my ideal career path and an alternative to it would be, you know, that kind of led in to like a skills audit – and now all the time informed by kind of discussion with ? around aspects of it I mightn't have thought of, what I would see as a gap that he'd see as something that he'd seen someone else in the past do something else to fill, that kind of thing, you know, so it was kind of quite iterative.

Q Okay.

A And In my usual way of doing these things, all the versions of it have your dates and version numbers and when you start getting to version twenty-seven you're yeah, this has changed a few times.

Q It would appear to be quite process driven. Was that the case?

A No, but it was, it was that kind of cyclical kind of, kind of a process. I suppose there was a lot of chat over coffee involved but in the background it did produce a, a succession of kind of plans and, you know, schemes on paper and the like which probably reflects the way both of us would work anyway.

Q It sounds very analytical more explicit knowledge exchange?

A Well you put a chemist and a microbiologist in the same room and you're going to end up with something reasonably analytical, you know, it's not, it's not surprising that it's covered in diagrams and doodles and tables and the rest of it.

Q Could you take yourself back to a moment when there was, you experienced a real moment of learning or breakthrough?

A Yeah, yes, I think the breakthrough moment came, it probably came in the first six weeks, two months of the process and I think the real breakthrough was, it wasn't what I was expecting, but it was the realisation that with starting point I was coming from at least the kind of academic, traditional academic career that I had envisaged going in to the scheme was a vanishingly small possibility.

Q Okay. And what was the reality of that?

A It came as a bit of a blow.

Q Was that difficult for you?

A But yeah, yeah, I think that was the breakthrough and it actually came quite early on and it would have changed the focus of what, what we worked on for most of the rest of the year.

Q Okay. So it kind of gave you a roadmap to deal with that. The establishment of trust within the mentoring relationship is a key component also – how would you say that trust was established?

A I don't, I don't know. It just happened very quickly and very easily. It would actually be very hard to put my finger on why it happened. I think we just, ? and I found we got on very well with each other –

Q it sounds –

A - we were kind of coming at it from similar points of view and I suppose we, we probably started from a point of view well we both of us volunteered to get involved in it, we were both of us interested in the outcomes of it and I suppose we really started from a position that until or unless anything happens to show either of us otherwise we're going to trust each other.

Q Excellent.

A You just have to. But it was easy to do it, and I think that was just a personality thing, it was just both of us found we got on well with the other, it was, there was no kind of, there was no big mismatch between what either of us expected out of it or how much time we thought we were going to have to put in to it or, or what one or the other understood it was or wasn't about. So I suppose in one way we were fortunate probably in that nothing really cropped up to give us any of the difficulties that could have undermined trust at the start.

Q Was it important to you?

A You know, so that kind of set us off on the right foot. And then nothing happened along the way to cause us any kind of upsets or difficulties that would cause anything in to question, so we were, we were very fortunate actually because no, we didn't do anything formal. I'd say the only formal thing we did was both of us did do the mentoring agreement and I think we, we took that quite seriously.

Q Yeah, that sounds like you did put a bit of work in to that.

A We did, we did and I think one of the big things we were both of us very expressly clear on from the outset was that whatever came out of it and whatever discussions or revelations or opinions or views there were that they would be between the two of us and they wouldn't go any further.

Q Okay.

A And they didn't

Q Brilliant, yeah.

A You know – and I think – but then I suppose I'm mindful, there would be people would say oh no, it's completely secret with me, and it wouldn't be, it might not be. But no, we never had any difficulty there but I think we kind of, we set out to, to start properly with the agreement in place.

Q Okay.

A We probably wouldn't have done it if it hadn't been suggested as part of the training.

Q Yes.

A It was probably, I think when first it was suggested to us we kind of went oh, that's a bit formal, isn't it?

Q Yeah.

A But we saw the sense of it.

Q Okay.

A And I think it was a good thing to do in that it did kind of set us up properly and –

Q That kind of brings me to my next question in that what do you think, do you think there's value in having a formal mentoring as opposed to informal mentoring that happens across institutions?

A Yes, I do, I do because I think – I have had and still have some ad hoc mentoring from various quarters, which is very welcome – but I'm fortunate to have it and I have a feeling I'm probably in the minority to have access to it. And as well I think the other advantage of the, the formal scheme is it puts you in contact with people from outside of your own circle, you know, kind of the – I mean I, I would still have regular contact with my PhD supervisor –

Q Okay, yes.

A Again with ? whom personally I got on with like a house on fire. Now ? was my supervisor and even though ? has retired going on seven years at this stage he would still, we'd still meet up about once a semester, we'd have, we'd meet for coffee and, you know, have a chat and see how things are going on and the like, you know, and he has always been very, very supportive but he would be coming from a place that is actually much closer to where I am now than ? would have been, for example. Now, and that little bit of distance –

Q Is that good?

A And, yes, it is, it is and someone coming from a slightly different environment and a slightly different combination of priorities and interests and experience,

it's useful, it's useful, because the, the mentoring you would get ad hoc would tend to be PhD supervisors –

Q Did you have a mentor within your department?

A PI, someone within in your, someone who's very close to the position you're in now and kind of someone a bit different, a little bit further away is a useful thing to have and not necessarily something you will – and the other thing as well is the, the mentors through the formal scheme, because they have no relationship to your day to day work, they've no vested interest in it.

Q Yes

A And that, that is a useful, I think that's a useful thing, to be getting advice from someone who has no interest in this other than the fact that they think it's a good enough idea that they're giving of their time to do it.

Q Exactly yes. What particular qualities or attributes would you feel your mentor had that made your relationship successful?

A I would say two: ? is very easy going, you know, so he's not, he's not at all, he's not precious about it, you know, he wasn't someone who became a mentor as, you know, I am the expert, I'm going to tell you how to be a mini ?. And the other thing is he's very open, you know, so he would share what advice and experience he had to offer readily, every bit as much advice on things that didn't work, things I wouldn't do again, things I seen others do that I wouldn't' suggest a third person do – as against being concerned with putting a brave face on things or, you know, putting the best foot forward or that sort of thing.

Q Yes

A Which is probably a very natural and human thing to do but not so useful when you're hoping to learn the things, mistakes not to repeat again.

Q Yeah, exactly. Would you find this valuable?

A Yes, yes, and which I could imagine a lot of people don't want to do or wouldn't feel comfortable doing, but yeah, he was, he was very, very open, very open that way, which is immensely useful.

Q So if I was to say to you what kind of intrinsic outcomes you would have experience, if any, from the mentoring what would you kind of –

A How do you mean by intrinsic?

Q Like more, say from a career development, personal development, job satisfaction, would that have had any effect on your own self as a result of the mentoring?

A Yes, yes, it would. Both up and down.

Q Okay.

A There was certainly a point during the process where I was very disillusioned.

Q Why?

A I suppose the realisation that my plans were not likely to work out as readily as I had envisaged them, that's quite a big realisation – yeah, there was quite a boost in it as well in that in looking at my background, which would be quite

unconventional, like my mix of experience going in to the process would be quite unusual for someone at my career point at the time, to realise that this, this is actually an advantage or this can be turned to an advantage, you know, that was encouraging. Yeah, there was certainly food for thought in it.

Q Okay.

A Certainly a lot of food for thought in it.

Q And then any tangible outcomes, had you any change of job, promotion or anything like that that you –

A No.

Q No, nothing, nothing like that.

A No.

Q So any, any, any other thoughts on the mentoring or about the process or where you feel it should go to next?

A It's certainly something I think there would be merit in, in it's being offered again.

Q Okay.

A I don't know if it has been in recent years. I know there was another round of it done the year after ? and I finished and I've a recollection of there being another call subsequently looking for mentors and mentees, but that would be probably three or four years ago at this stage.

Q Yes

A And I don't know that it's happened more frequently, more regularly, no, recently than that – or if it has I haven't been aware that it has.

Q Do you think there is value in offering formal mentoring in the future?

A Yeah, I think there would be value in it. I'd be, I'd be actually surprised if many people on the research side of things would actively come looking for it.

Q Really?

A It's just not something that's on their radar.

Q And yet we have research coaching now, are they availing of the research coaching, but that's more for I suppose for getting published and for those engaged in research. You see I see the coaching quite, it's quite different. The coaching for research is very specific to helping you to write a paper that's going to get published.

A Yeah, no I would have done a share of the coaching workshops on foot of specific aspects of the, the mentoring that I did and, and this would have been in the earlier stages of the coaching programme, which I think has become rather more developed now than it was, but they're much more task focused, you know, they are very, they're now kind of at the level o I'm doing a proposal for Horizon 2020, Pillar 2 – not pillar 1, not 3, two – and I'm going to write section 3.4, what do I need to put in that –

Q Okay, so would you see coaching as very task driven?

A Yes. It's really task driven, whereas the mentoring – and I think it's kind of more, it's classed more on outputs that tied back to the day job.

Q Yes. So why are researchers more likely to look for coaching?

A So in that sense it's probably something that a lot of the, the researchers are less inhibited to engage in because it ties in to the job that they're there to do, whereas the, the mentoring is more the things we all know we should be doing for ourselves and yes, we'll get to them, we'll get to them, one of these days we'll get to them, but something else always gets in the way and something else always comes along, whereas having the formal process, well the big thing I found with it was it made me say right, in two and a half months time ? and I are going to have to sit down and have a look at this, so before that point I'm going to have to something with this, you know and if the end outcome is to go in and say to him I haven't a clue where I'm going – well at least if you say well I haven't a clue where I'm going because I've sat down and tried to figure it out and I can't figure it out on my own, what do you think about it, as opposed to the I haven't figured it out because I'm not actually taking the time out to sit down and have a look at it, which is what I think often happens otherwise. But even with the research coaching I wouldn't' have thought the uptake is anything like as big as the number of people who could actually benefit from it.

Q Why do you think that is?

A you know, again it's the kind of thing if even if it's, unless it's directly related to they are doing the job that is in the title of the coaching session this week they don't necessarily make the time to go for it. So I'd say I could see a lot then not making the time, as they would see it, to take time away from the job –

Q I know, whereas it might be time better spent.

A I felt it was. I definitely felt it was because it does, it does kind of make you sit back and think as well, or it made me sit back and think well why am I doing this, there is a whole myriad of things that are in the diary today, why am I doing – and what are they actually about, what am I trying to achieve with them, you know, and that thought process does make you realise, or it made me realise, that there was a share I was spending time on that wasn't actually doing a whole lot of good for anyone, you're kind of falling in to the category of well it has to be done because we always did it.

Q So the mentoring helped in that way?

A But it actually made me go well, why did we always do it and why are we still doing it when we could be using the time to do something else or something, you know, more, more lucrative.

Q Yeah, to, maybe a bit of time to think and –

A Yes, yes.

Q - Think back on it. And having been a mentee now is mentoring something, would you ever consider acting as a mentor yourself?

A Well I had offered subsequently to, to act as a mentor as well.

Q **Yes**

A And yes, I would, I certainly would –

Q **Would you like to give something back now?**

A It's something I have done elsewhere, I've not done it or not had the chance to do it in, in the capacity of the day job here in … but I have done it elsewhere, ah yes, it's certainly something I'd be happy to do here as well.

Q **Very good. So thank you… end).**